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Creating healthier places and spaces for our present and future generations



Low levels of
air pollution

Building design promotes
health and well-being

Accessible and well-maintained green
infrastructure, open green spaces and blue spaces

Local food growing and food
retail environment enhances
access to healthy food choices

Community, health and social
care services provided from
local facilities

Inclusive infrastructure
prioritises walking and cycling,
and improves road safety

Creating healthier places and spaces for our present and future generations

Developed to support the implementation of the Well-being of Future Generations (Wales) Act 2015 by:

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April 2018

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ISBN 978-1-910768-77-8

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Design: Jenney Creative www.jenneycreative.co.uk



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1. About this Resource

This resource has been created to support Public Services Boards, public bodies, cross sector organisations and individuals take forward actions that address and enhance the health and well-being opportunities afforded by the natural and built environment. It has been developed in response to the *Well-being of Future Generations (Wales) Act 2015*⁽¹⁾, with input from Natural Resources Wales demonstrating commitment to working together on delivering the Act.

The resource provides background information, summarises some of the relevant evidence, proposes actions for implementation at strategic and operational level and signposts to further useful resources. Specifically, the resource focuses on six priority areas of the built and natural environment that can positively impact on health and well-being. These are:



the walking and cycling infrastructure



open green /blue spaces and green infrastructure



the food growing and retail environment



community, health and social care services provided from local facilities



low levels of air pollution



building design.

2. Strategic Context

The Welsh policy and legislative agenda, including the *Well-being of Future Generations (Wales) Act 2015*, the *Environment (Wales) Act 2016*, the *Public Health (Wales) Act 2017*, the *Active Travel (Wales) Act 2013* and the revision of *Environmental Impact Assessment Regulations (2017)*, are supportive of the built and natural environment promoting health and well-being. For example,

- Four of the *Well-being of Future Generations Act* goals - 'A prosperous Wales', 'A resilient Wales', 'A Wales of connected communities' and 'A globally responsible Wales' - specifically mention the role of the environment in promoting well-being. These goals contribute to the goal, 'A healthier Wales'.⁽¹⁾
- The *Natural Resources Policy (NRP)*⁽²⁾ under the *Environment (Wales) Act 2016* states that Wales' natural resources provide opportunities to:
 - ◆ Support successful, sustainable communities;
 - ◆ Promote green growth and innovation to create sustainable jobs;
 - ◆ Support a more resource efficient economy; and,
 - ◆ Maintain healthy, active and connected communities.
- The *Public Health (Wales) Act 2017*⁽³⁾ proposes that health impact assessments be undertaken by public bodies in specific circumstances, some of which may be in relation to planning and environment decisions. Health impact assessment is a useful tool in judging the potential effects, and the distribution of those effects, on the health of a population of a policy, programme or project.

In addition, Welsh Government's *Prosperity for all – the national strategy*⁽⁴⁾, *Planning Policy Wales*⁽⁵⁾ and the *Wales Spatial Plan People, Places, Futures*⁽⁶⁾ set out national land use planning policies and highlight the commitment to embedding sustainable development into the planning system. Local Development Plans, that detail local authority land use priorities, are expected to address sustainable development and focus on economic, environmental and social concerns, together with health and well-being considerations.

It is also expected that the proposed all Wales national obesity prevention strategy, the National Development Framework and the Clean Air Zone Framework will support actions to enhance the impact of the environment on well-being.

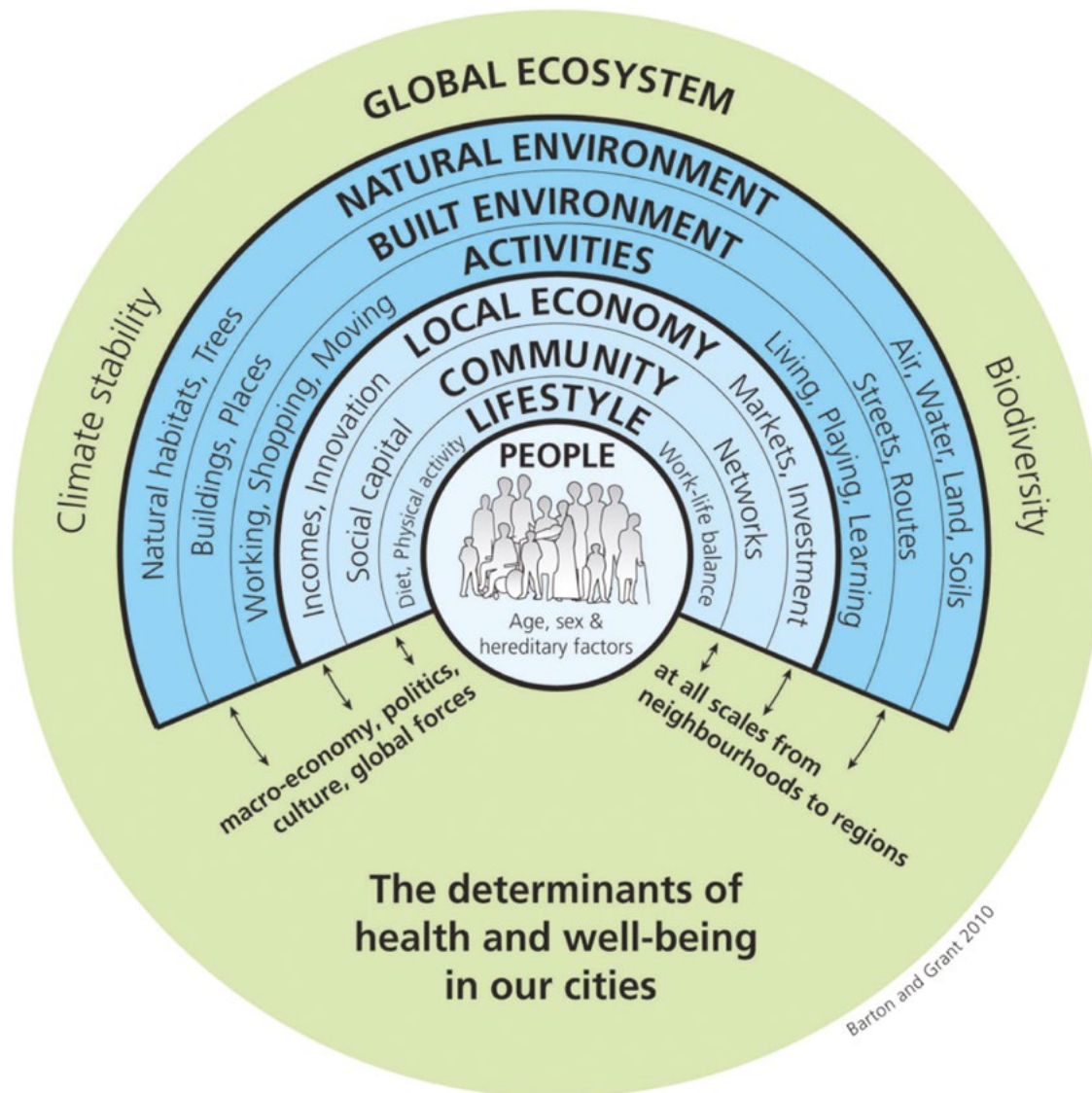
3. The impact of the built and natural environment on well-being

Evidence demonstrates that the built and natural environment (buildings, places, streets, routes, land, watercourses, natural habitats) and the activities undertaken in these (living, working, learning, playing, shopping, travelling, moving) can support physical and mental well-being. The presence of specific characteristics such as having access to green open spaces⁽⁷⁾, to healthy food⁽⁷⁾, to opportunities for being active⁽⁷⁾, to clean air⁽⁷⁾, to well-designed buildings that promote well-being⁽⁸⁾, and to supportive services delivered from local facilities⁽⁸⁾ have been shown to help people thrive. Conversely, where these characteristics are missing or limited, for example lack of open green spaces, there is likely to be a negative impact on population health and well-being and it is those living in the most disadvantaged areas that experience a disproportionately high level of adverse impacts.⁽⁹⁾

Various models have been proposed to illustrate and explain the links between the environment and well-being:

- The Health Map⁽¹⁰⁾ (Figure 1) sets out the interactions and influences affecting health and well-being and illustrates the close association between the built and natural environment within which people live, lifestyle choices adopted, availability of accessible services, sense of community, social relationships, good jobs, and the creation of sustainable and healthy, thriving communities. The interaction between and within the layers of the Health Map helps understanding of the issues and highlights areas for action.

Figure 1 The Health Map



Source: Barton H, Grant M. A health map for the local human habitat. *Perspectives in Public Health* 2006; 126: 252-253.

- Learning from the Well-being Assessments ⁽¹¹⁾ across Wales informed the development of a model that demonstrates an integrated picture of well-being from the individual to the strategic (Figure 2). The model highlights opportunities for addressing population health and illustrates that the built and natural environment has a role to play in many areas that influence well-being.

Figure 2 Explaining well-being: from the individual to the strategic



Source: Future Generations Commissioner for Wales. *Well-being in Wales: Planning today for a better tomorrow. Learning from well-being assessments 2017*

4. What we know and what works

Six priority areas of the built and natural environment that promote health and well-being are considered in this resource. Numerous links and associations between the priority areas are possible creating enhancing and synergistic effects. For each area, an evidence summary is provided and a range of strategic and operational level actions identified that could improve health and well-being and support the delivery of the Well-being Goals. To be effective, many of the actions require embracing the five ways of working (Figure 3) promoted by the *Well-being of Future Generations (Wales) Act 2015*.

Figure 3 The five ways of working



Long term



Prevention



Integration



Collaboration



Involvement

Additionally, engagement with local communities and stakeholders is essential to ensure actions and improvements address local needs and reduce inequalities in health. Interventions are most effective when improvements to the physical environment are planned and designed with the local community and the intended users. Health impact assessment is a useful tool in supporting this engagement and involvement.⁽¹²⁾

4.1 Inclusive infrastructure that prioritises walking and cycling¹, and improves road safety

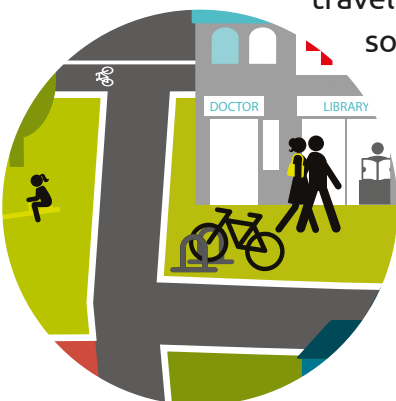
Being physically active benefits individual and population health and reduces the risks of obesity and chronic conditions; inactivity cost the NHS in Wales £35 million in 2015.⁽¹³⁾ Supporting walking and cycling has been identified as a 'best buy' to increase physical activity levels⁽⁷⁾ and it is estimated that living in an activity-friendly neighbourhood can provide between 32% and 59% of the 150 minutes of weekly physical activity that is recommended for adults to maintain good health.⁽⁸⁾



Living in an activity-friendly neighbourhood can provide between 32% and 59% of the 150 minutes of weekly physical activity that is recommended for adults to maintain good health

Evidence suggests investment in infrastructure that provides inclusive, well-designed and connected trails leading to workplaces⁽¹⁴⁾, schools, recreational centres and social amenities, with pavements, safe crossings and attractive sights in areas^(15, 16), can support walking and cycling and increase levels of physical activity among all age groups.

⁽¹²⁾ ⁽¹⁷⁾ Walkable neighbourhoods encourage active travel^(8, 14, 18), use of sustainable travel modes (bus, train and tram) and provide opportunities for social interaction, for participating in and enjoying the outdoor environment and to reducing car travel.⁽¹⁹⁾ Initiatives that improve conditions for walking and cycling through reducing speed limits to 20 mph, implementing traffic calming and designating streets as home zones where pedestrians take priority^(17, 18), also contribute to improving road safety.⁽¹⁹⁾



1 Cycling includes the use of adapted cycles, such as trikes, tandems and handcycles

Inclusive infrastructure that prioritises walking and cycling, and improves road safety

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards Urban and rural planners Urban and rural transport planners Developers Health strategy and service planners Public health Local authorities Health Boards / Trusts Natural Resources Wales	<p>Ensure Local Development Plans, Supplementary Planning Guidance and development plans (housing, retail, commercial and public sector) provide infrastructure that prioritises walking and cycling</p> <p>Implement the <i>Active Travel (Wales) Act 2013</i> at national and local level</p> <p>Ensure transport plans and strategies include the development and delivery of active travel infrastructure and fully integrated transport systems</p>	<p>Provide interconnected high-quality infrastructure networks that facilitate access to inclusive, well-designed facilities and employment opportunities by walking and cycling</p> <p>Prioritise the retention, development and maintenance of the green infrastructure within route design and development</p> <p>Prioritise the pedestrian over motorised transport by, for example, implementing 20mph zones, making use of a variety of methods to reduce and control traffic speed (signage, road materials, design, layout, shared surfaces)</p> <p>Provide cycle ways and cycle paths that are safely separated from motorised traffic</p> <p>Provide integrated public transport systems</p> <p>Ensure the infrastructure supports people with limited mobility and the use of adapted cycles</p> <p>Reduce traffic emissions and traffic speed using road layout, clean air zones and no engine idling zones, for example</p> <p>Engage with individuals, groups and communities in the design and delivery of interventions that encourage access to and use of the available infrastructure. Dual approaches of improving infrastructure and engaging communities are most effective in changing behaviour. Health impact assessment is a useful tool in supporting engagement and involvement</p>	<p>Increase in physical activity rates</p> <p>Increase in community cohesion leading to stronger sense of identity and improved mental well-being</p> <p>Reduction in chronic conditions and respiratory illnesses</p> <p>Reduction in levels of low mood and anxiety</p> <p>Reduction in fatalities caused by road traffic accidents</p> <p>Improved air quality</p> <p>Reduction in carbon emissions</p>

Action within this priority area also contributes to :-

- Accessible and well-maintained green infrastructure, open green spaces and blue spaces
- Low levels of air pollution

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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4.2 Accessible and well-maintained green infrastructure, open green spaces and blue spaces

Parks, open spaces, playing fields, woodlands, wetlands, road verges, allotments and private gardens are examples of green infrastructure while sustainable drainage systems, swales, wetlands, rivers and canals and their banks, and other water courses are often referred to as blue infrastructure. Access to, and engagement with, this natural environment is associated with positive health outcomes, including improved physical and mental health, and reduced risk of cardiovascular disease and other chronic conditions. ⁽²⁰⁾ Access to recreational infrastructure, such as parks and playgrounds, has been found to be associated with reduced risk of obesity among adolescents and increased physical activity levels. Similarly, park improvements can increase visits /use and physical activity levels of children and older people. Living near green spaces, such as parks and other open spaces can improve health, regardless of social class. ⁽¹⁴⁾



Access to, and engagement with, this natural environment is associated with positive health outcomes, including improved physical and mental health, and reduced risk of cardiovascular disease and other chronic conditions

Improving access to green infrastructure and spaces also contributes to reducing exposure to environmental hazards and air pollution, improving air quality, reducing the impact of climate change, protecting against flooding and erosion, and increasing social participation among older adults. ^(8, 14, 21)

Accessible and well-maintained green infrastructure, open green spaces and blue spaces

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards	Ensure Local Development Plans, Supplementary Planning Guidance and development plans (housing, retail, commercial and public sector) provide green infrastructure and open green/blue spaces	Provide (retain, retrofit, and design in) green infrastructure elements within new and regenerated developments of housing, transport routes and healthcare and education establishments	Increase in physical activity rates
Urban and rural planners		Provide high-quality natural green open spaces of different sizes that are easy to access from dwellings – for example, no-one should live more than 400 metres from their nearest area of natural green space	Increase in community cohesion leading to stronger sense of identity and improved mental well-being
Urban and rural transport planners	Ensure Open Space Strategies and Transport Plans provide and facilitate access to, green infrastructure	Provide opportunities for active and informal play within residential areas, within natural play spaces where possible	Reduction in chronic conditions and respiratory illnesses
Developers		Follow planning guidance that sets out the standards for outdoor playing space	Reduction in levels of low mood and anxiety
Health strategy and service planners	Implement the <i>Active Travel (Wales) Act 2013</i> , including green infrastructure in design and route planning guidance	Provide play spaces that are easy and safe to access by walking and cycling, and well over-looked to ensure safety	Improved air quality
Public health		Engage individuals, groups and communities in designing and delivering interventions that encourage access to and sustainable use of the available spaces through the life course. Dual approaches of improving infrastructure and engaging communities are most effective in changing behaviour. Health impact assessment is a useful tool in supporting engagement and involvement.	Reduced 'urban heat island' effects
Local authorities			Reduced flood risk
Health Boards / Trusts			Increase in biodiversity
Natural Resources Wales			
Third sector			

Action within this priority area also contributes to :-

- Inclusive infrastructure that prioritises walking and cycling, and improves road safety
- Low levels of air pollution

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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4.3 Local food growing and retail environment that enhances access to healthy food choices

Access to a food environment that promotes healthy food choices is known to improve health, support the maintenance of a healthy weight and reduce the risks of developing long term chronic conditions. ⁽⁸⁾ It is an essential part of a multi-component approach to reducing levels of overweight and obesity that also considers, for example, individual behaviour change, food preparation and food served in schools, workplaces and NHS settings.



Access to a food environment that promotes healthy food choices is known to improve health, support the maintenance of a healthy weight and reduce the risks of developing long term chronic conditions

Access to food growing spaces within communities such as gardens, allocated food growing spaces near community buildings, and allotments impacts positively on attitudes towards healthier foods, physical activity levels, social connectivity and fruit and vegetable consumption. ^(8, 15, 16) Availability of local healthy, affordable food is associated with improved attitudes towards healthy eating and healthier food purchasing behaviour and improved dietary behaviours (such as increased fruit and vegetable consumption). Conversely, increased access to unhealthy food retail outlets is associated with increased weight status and unhealthy eating behaviours among children in low income areas. ⁽⁸⁾



Local food growing and retail environment that enhances access to healthy food choices

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards	Ensure Local Development Plans, Supplementary Planning Guidance and development plans (housing, retail, commercial and public sector) include food growing spaces and improve choice within the food retail environment	Support access to, and improved choice within, the local food retail environment by, for example, <ul style="list-style-type: none"> ensuring shops/markets that sell a diverse offer of food choices are easy to get to by walking, cycling or public transport understanding the density of hot-food takeaways across communities and local authority areas and influencing policy, if appropriate, to restrict their proximity to schools and other facilities for children, young people and families 	Increase in consumption of fruit and vegetables
Urban and rural planners		Ensure all statutory and public organisations provide <ul style="list-style-type: none"> a healthy food offer for staff, visitors and customers or patients at leisure centres, workplaces, schools and hospitals food growing opportunities that deliver food for the establishment's kitchens 	Increase in physical activity rates
Developers		Establish food procurement policies that purchase supplies locally, reducing overall transport impact	Reduction in levels of low mood and anxiety
Public health		Enhance existing opportunities for food-growing and prevent the loss of food-growing spaces in developments	Reduction in levels of overweight and obesity
Local authorities		Provide households with access to space to grow food – for example roof or communal gardens, or allotments	Reduction in chronic conditions
Health Boards / Trusts		Ensure school playground design supports food growing opportunities	Increased biodiversity
Schools – designers and teachers	Ensure Open Space strategies and policies, for example, establish and maintain community gardens and allotments in parks	Engage individuals, groups and communities in designing and delivering interventions that encourage access to and use of the food retail and growing environment. Dual approaches of improving the environment and engaging communities are most effective in changing behaviour. Health impact assessment is a useful tool in supporting engagement and involvement	Reduced 'food miles' leading to improved air quality

Action within this priority area also contributes to :-

- Inclusive infrastructure that prioritises walking and cycling, and improves road safety
- Low levels of air pollution

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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4.4 Community, health and social care services delivered from local facilities

Access to and availability of services provided in good quality local facilities promotes health and reduces inequalities in health, in addition to being crucial for economic, social, cultural and environmental sustainability. Health and social care services, libraries, shops, schools, and arts, leisure and community activities provided from well positioned and well-designed facilities can result in positive impacts on health and well-being.⁽¹⁶⁾



Access to and availability of services provided in good quality local facilities promotes health and reduces inequalities in health



Building and regenerating complete and compact neighbourhoods with local services at the centre also contributes to increasing physical activity levels, safer roads and enhanced social participation.⁽⁸⁾

Community, health and social care services delivered from local facilities

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards	Ensure Local Development Plans, Supplementary Planning Guidance and development plans provide facilities for the delivery of local services Influence strategies and plans of health boards/trusts and local authorities to include the delivery of services from local shared infrastructure	Provide health and social care services from local, shared use facilities	Increase in physical activity rates
Urban and rural planners		Provide community facilities at an early stage within new developments to help people feel connected and to provide a local destination	Reduction in levels of low mood and anxiety
Urban and rural transport planners		Provide community facilities that are easy to get to, conveniently located, well signposted, close to public transport and on walking and cycling networks	Reduction in chronic conditions
Health strategy and service planners		Ensure health and community services have travel plans that promote sustainable and active travel	Improved air quality
Developers		Ensure green infrastructure is considered in designs and plans	
Public health		Work with communities to influence design, location, access and delivery. Health impact assessment is a useful tool in supporting engagement and involvement.	
Local authorities			
Health Boards / Trusts			
Third sector			

Action within this priority area also contributes to :-

- Inclusive infrastructure that prioritises walking and cycling, and improves road safety
- Accessible and well-maintained green infrastructure, open green spaces and blue spaces
- Building design that promotes health and well-being

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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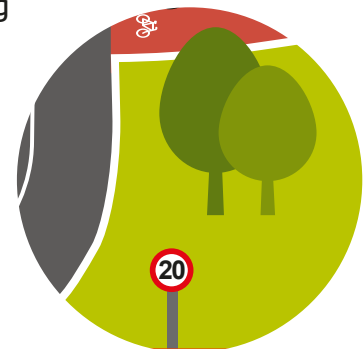
4.5 Low levels of air pollution

... living in an area with clean air can lead to positive changes in people's health behaviours

Exposure to air pollution ⁽²²⁾ negatively impacts on health and well-being, increasing the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases and imposes a considerable cost to society. ⁽⁷⁾ Invariably there is a disproportionate impact on disadvantaged groups. ^(9, 19)

Recent evidence indicates that living in an area with clean air can lead to positive changes in people's health behaviours and is associated with increased physical activity among older adults.⁽⁸⁾ Air quality can be improved through establishing green infrastructure (open spaces, trees and hedgerows), promoting active travel and sustainable transport, providing a fully integrated transport system, developing well connected, active and social communities and through reducing traffic congestion and emissions. ⁽¹⁹⁾

Urban tree planting also reduces particulate pollution and atmospheric carbon.



Low levels of air pollution

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards	Support the development and implementation of clean air strategies	Provide the infrastructure for active and sustainable travel supported by a fully integrated transport system	Increase in physical activity rates
Urban and rural planners	Ensure Local Development Plans and Supplementary Planning Guidance provide and maintain infrastructure that supports active travel and low emission transport	Develop well connected, active and social communities Introduce clean air zones	Reduction in chronic conditions and respiratory illnesses
Urban and rural transport planners	Implement the <i>Active Travel (Wales) Act 2013</i>	Retain and establish new green infrastructure (open spaces, trees, hedgerows, etc)	Reduction in levels of low mood and anxiety
Health strategy and service planners	Ensure Open Space Strategies and Transport Plans provide and facilitate access to, green infrastructure	Introduce 20mph zones without physical measures	Reduction in fatalities caused by road traffic accidents
Developers	Ensure Transport Plans develop and deliver fully integrated transport systems	Reduce traffic congestion and implement low emission zones	Improved air quality
Public health		Provide electric vehicle charging points in workplaces, commercial developments and residential areas	
Local authorities		Introduce bylaws to support 'no idling' areas where vulnerable groups congregate such as outside schools, hospitals and care homes	
Health Boards / Trusts		Engage individuals, groups and communities in designing and delivering interventions that address air quality issues. Health impact assessment is a useful tool in supporting engagement and involvement.	
Natural Resources Wales			
Third sector			

Action within this priority area also contributes to :-

- Inclusive infrastructure that prioritises walking and cycling, and improves road safety
- Accessible and well-maintained green infrastructure, open green spaces and blue spaces

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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4.6 Building design promotes health and well-being

Buildings in which we live and work can have a profound impact on health and well-being. Poor quality housing, including issues such as mould, lack of warmth and energy inefficiency, noise and lack of green space, is linked to physical and mental ill-health. ⁽⁸⁾ Insulated, warm, naturally lit and well-ventilated homes and buildings can help improve general health and well-being, reduce respiratory conditions, improve mental health and reduce health inequalities.⁽⁸⁾ Provision of diverse forms and types of housing has been associated with increased physical activity, and the provision of mixed land use and affordable housing is strongly associated with improved safety perceptions in the neighbourhood, particularly among individuals from low-income groups. Homes that have adequate kitchen facilities, cycle storage and access to outdoor spaces also contribute to overall well-being.⁽¹⁶⁾



Insulated, warm, naturally lit and well-ventilated homes and buildings can help improve general health and well-being, reduce respiratory conditions, improve mental health and reduce health inequalities

For non-residential settings, well designed buildings can improve the well-being, productivity and satisfaction of people working in a building, while reducing operational costs, enhancing asset value, and increasing market demand for spaces. Design characteristics that are thought to enhance health and well-being include attractive, visible and signed stairwells; provision of cycle storage and changing facilities; appropriate use of colour; and minimised car parking space.^(16, 17)

Outdoor environments around dwellings and workplaces that maximise use of the green infrastructure also contribute to well-being, for example, providing green walls/facades, food growing opportunities, wildlife gardens.

Building design promotes health and well-being

Who Profession / organisation	What could and should be done		Potential impact of action
	Strategic level actions	Operational level actions	
Public Service Boards	Ensure Local Development Plans and Supplementary Planning Guidance provide guidance on building design that promotes health and well-being Influence the design of homes, schools, workplaces, hospitals and health and social care facilities Ensure Housing Strategies provide affordable, energy efficient homes and maximise green infrastructure opportunities	Support the provision of affordable, energy efficient homes	Increase in physical activity rates
Urban and rural planners		Ensure natural lighting and good ventilation is provided within homes and buildings	Reduction in chronic conditions
Urban and rural transport planners		Ensure the provision of safe, accessible housing for those with sensory or physical impairments and/or limited mobility and with consideration of dementia friendly environments	Reduction in levels of low mood and anxiety
Health strategy and service planners		Ensure new buildings are linked to the walking and cycling infrastructure Provide cycle parking /storage	Improved feelings of well-being
Developers		Ensure the design of outdoor environments around dwellings and other buildings maximises green infrastructure opportunities	Improved air quality
Public health		Ensure stairs are clearly signposted, attractive to use and positioned in buildings to encourage use	Reductions in carbon emissions
Local authorities		Provide electric vehicle charging points in residential areas, workplaces and in commercial developments	
Health Boards / Trusts		Promote the design of buildings and bridges that reduce the potential for slips or falls and that reduce suicide harm through restricting access to the means of suicide	
Natural Resources Wales		Engage communities and stakeholders in the design of local buildings and facilities. Health impact assessment is a useful tool in supporting engagement and involvement.	
Third sector			

Action within this priority area also contributes to :-

- Accessible and well-maintained green infrastructure, open green spaces and blue spaces
- Low levels of air pollution

Well-being Goals addressed

A prosperous Wales	A resilient Wales	A healthier Wales	A more equal Wales	A Wales of cohesive communities	A Wales of vibrant culture and thriving Welsh language	A globally responsible Wales
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5. What we can do together

Public Service Boards, urban and rural planners, urban and rural transport planners, health strategy and service planners, developers, public health, local authorities, health boards /trusts, Natural Resources Wales and the third sector all have the potential of influencing the built and natural environment across all or the majority of the priority areas, as Figure 4 highlights.

Figure 4 Influencers of the priority areas

	Public Service Boards	Urban and rural planners	Urban and rural transport planners	Health strategy and service planners	Developers	Public health	Local authorities	Health Boards / Trusts	Natural Resources Wales	Third sector
Walking and cycling infrastructure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Open green /blue spaces and green infrastructure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Food growing and retail environment	✓	✓		✓	✓	✓	✓ Especially schools (designers and teachers)	✓		✓
Community, health and social care services provided from local facilities	✓	✓	✓	✓	✓	✓	✓	✓		✓
Low levels of air pollution	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Building design	✓	✓		✓	✓	✓	✓	✓	✓	

Partnership working opportunities exist to influence strategies, for example local development plans and transport plans, and to take forward some crucial actions at operational level, for example the provision of green infrastructure and designing well connected communities.

6. Examples of improving well-being through influencing places and spaces

The following provides some examples and case studies that illustrate actions taken by organisations to influence the built and natural environment to improve health and well-being.

Cardiff Local Development Plan to 2026 and the Planning for Health and Well-being Supplementary Planning Guidance (SPG)



The SPG provides further guidance on the implementation of the Healthy Living (KP14) and Health (C6) policies within the adopted Cardiff Local Development Plan

Health impact assessments (HIA) undertaken of local development plans in Cardiff and the Vale of Glamorgan



The reports summarise the HIA's of the plans, identifying mitigating and strengthening actions together with statements of how the HIA's have influenced the plans.

Copenhagen Green Cycle Routes



Copenhagen commenced its integrated transport plan in 1947 and sustainable development and quality of life are the two themes of Copenhagen's vision for the future. The Copenhagen Green Cycle Routes are examples of retrofitting and integrating green active travel routes within an existing dense urban setting. The increased investment in public space since the 1970s has been linked directly to a 65% rise in the number of cyclists and a significant drop in both the quantity and speed of traffic.

Freiburg



Sustainability policy in Freiburg, Germany since 2009 has focused on transport policy (that avoids car use), community engagement, recycling and waste management, climate protection and open spaces and has resulted in increased walking and cycling, improved road safety and air quality, and increased use of open spaces.

London



The London Plan includes commitment to improving health and addressing health inequalities by ensuring co-ordinated investment in physical improvements, co-ordinated planning and action on the environment, climate change and public health and promoting a strong and diverse economy.

NHS England Healthy Towns initiative

NHS England is working with 10 housing developments across England to shape the health of communities. The programme, commenced in 2016, is uniting public health, NHS providers and commissioners, planning and housing developments to plan and build healthier places. It also aims to demonstrate how land can be used to return benefit to local communities and the wider system.



Parc Peulwys, Conwy

Parc Peulwys is a housing estate in North Wales transformed by housing improvements and the provision of green open spaces. A park like atmosphere has been created within a social housing environment, adopted and owned by the community. The estate won a Green Flag Award from Keep Wales Tidy in 2015.



Examples of green active travel routes case studies are available at the [Central Scotland Green Network](#).

Further examples and case studies are available within the Town and Country Planning Association (TCPA) publication '[Guide 8 Creating health-promoting environments](#)' page 29-31.

Examples of shared use facilities

- The **Bromley By Bow Centre**, in Tower Hamlets, combines health and well-being activities, primary care services and a community cafe, with well maintained buildings and open spaces.
- **Houghton-le-Spring Primary Care Centre** combines health and social care facilities and is linked to an existing sport and leisure facility.

7. Useful resources

- Town and Country Planning Association (TCPA) /Wales Health Impact Assessment Support Unit (WHIASU) report *'Planning for better health and well-being in Wales. A briefing on integrating planning and public health for practitioners working in local planning authorities and health organisations in Wales'*
- TCPA Practical Guides - *Guide 8: Creating health promoting environments*
- *TCPA Guidance on healthy environments*
- WHIASU *'Health Impact Assessment. A practical guide'* (English, Cymraeg)
- WHO Health Economic Assessment Tool (HEAT) for Walking & Cycling

8. References

1. *Well-being of Future Generations (Wales) Act 2015 anaw 2*. [Online] 2015. Available at: <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted> [Accessed: 11th Mar 2018]
2. Welsh Government. *Natural Resources Policy WG31033*. [Online] 2017. Available at: <https://gov.wales/docs/desh/publications/170821-natural-resources-policy-en.PDF> [Accessed: 27th Mar 2018]
3. *Public Health (Wales) Act 2017 anaw 2*. [Online] 2017. Available at: <http://www.legislation.gov.uk/anaw/2017/2/contents/enacted> [Accessed: 11th Mar 2018]
4. Welsh Government. *Prosperity for all: the national strategy*. [Online] 2017. Available at: <https://gov.wales/docs/strategies/170919-prosperity-for-all-en.pdf> [Accessed 11th Mar 2018]
5. Welsh Government. *Planning policy Wales*. 9th ed. [Online] 2016. Available at: <https://gov.wales/topics/planning/policy/ppw/?lang=en&> [Accessed: 11th Mar 2018]
6. Welsh Government. *The Wales Spatial Plan. People, places, futures*. [Online] 2008. Available at: <https://gov.wales/docs/desh/publications/130701wales-spatial-plan-2008-update-en.pdf> [Accessed: 11th Mar 2018]
7. Public Health Wales. *Making a difference: Investing in sustainable health and well-being for the people of Wales. Supporting evidence 2016*. Public Health Wales. [Online] 2016. Available at: <http://www.wales.nhs.uk/sitesplus/888/page/87106> [Accessed: 11th Mar 2018]
8. Public Health England. *Spatial planning for health. An evidence resource for planning and designing healthier places*. [Online] 2017. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/625568/Spatial_planning_for_health_an_evidence_resource.pdf [Accessed: 11th Mar 2018]
9. Marmot Review Team. *The Marmot Review: implications for spatial planning*. [Online] 2011. Available at: <http://www.instituteofhealthequity.org/resources-reports/the-marmot-review-implications-for-spatial-planning> [Accessed: 11th Mar 2018]
10. Barton H, Grant M. A health map for the local human habitat. *Perspectives in Public Health* 2006; 126: 252-3.

11. Future Generations Commissioner for Wales. *Well-being in Wales. Planning today for a better tomorrow. Learning from well-being assessments 2017*. [Online] 2017. Available at: https://futuregenerations.wales/wp-content/uploads/2017/07/FGCW_Well-being_in_Wales-Planning_today_for_a_better_tomorrow_2017FINALENG.pdf [Accessed: 11th Mar 2018]
12. Wales HIA Support Unit. *Health Impact Assessment. A Practical guide*. [Online] [n.d.] Available at: <https://whiasu.publichealthnetwork.cymru/en> [Accessed: 30th Apr 2018]
13. Public Health Wales NHS Trust. *Physical inactivity costs NHS Wales £35m a year – new research*. [Press release] (10 Oct 2017) [Cited 2018 Mar 2018]. Available at: <http://www.screeningforlife.wales.nhs.uk/news/46348>
14. School of Sport, Exercise and Health Sciences Active. *Physical activity for adults. Evidence briefing*. [Online] 2015. Available at: <http://www.ssehsactive.org.uk/resources-and-publications-item/40/517/index.html> [Accessed: 11th Mar 2017].
15. Town and Country Planning Association. *Planning healthy-weight environments - a TCPA reuniting health with planning project*. [Online] 2014. Available at: <https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=7166d749-288a-4306-bb74-10b6c4ffd460> [Accessed: 11th Mar 2018]
16. Town and Country Planning Association. TCPA Practical Guides. Guide 8. *Creating health-promoting environments*. [Online] 2017. Available at: <https://www.tcpa.org.uk/tcpa-practical-guides-guide-8-health> [Accessed: 11th Mar 2017]
17. National Institute for Health and Care Excellence. *Physical activity and the environment*. NG90. [Online] 2018. Available at: <https://www.nice.org.uk/guidance/ng90> [Accessed: 17th Mar 2018]
18. National Institute for Health and Care Excellence. *Physical activity: walking and cycling*. PH41. [Online] 2012. Available at: <https://www.nice.org.uk/guidance/ph41> [Accessed: 17th Mar 2018]
19. Cardiff & Vale University Health Board. *Moving forwards: Healthy travel for all in Cardiff and the Vale of Glamorgan. Annual Report of the Director of Public Health for Cardiff and Vale of Glamorgan 2017*. [Online] 2017. Available at: <https://www.cardiff.gov.uk/ENG/resident/Parking-roads-and-travel/transport-and-clean-air-green-paper/Documents/Moving%20forwards%20-%20DPH%20annual%20report%20Cardiff%20and%20Vale%202017.pdf> [Accessed: 17th Mar 2018]
20. Public Health England. *Local action on health inequalities: Improving access to Green Spaces*. [Online] 2014. Health Equity Evidence Review 8: Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357411/Review8_Green_spaces_health_inequalities.pdf [Accessed: 17th Mar 2018]
21. World Health Organization. *Urban green space interventions and health: A review of impacts and effectiveness*. [Online] 2017. Available at: http://www.euro.who.int/__data/assets/pdf_file/0010/337690/FULL-REPORT-for-LLP.pdf?ua=1 [Accessed 11th Mar 2018]
22. National Institute for Health and Care Excellence. *Air pollution: outdoor air quality and health*. NG70. [Online] 2017. Available at: <https://www.nice.org.uk/guidance/ng70> [Accessed: 11th Mar 2018]



Health Improvement

Providing information, advice and taking action, across sectors, to promote health, prevent disease and reduce health inequalities



Health Protection

Providing information, advice and taking action to protect people from communicable disease and environmental hazards



Health intelligence

Providing public health data analysis, evidence finding and knowledge management



Microbiology

Providing a network of microbiology services which support diagnosis and management of infectious diseases

Public Health Wales what we do

We exist to protect and improve health and wellbeing and reduce health inequalities for people in Wales. We work locally, nationally and internationally, with our partners and communities, in the following areas:



Safeguarding

Providing expertise and strategic advice to help safeguard children and vulnerable adults



Screening

Providing screening programmes which assist the early detection, prevention and treatment of disease



Primary, community and integrated care

Strengthening public health impact through policy, commissioning, planning and service delivery



NHS quality improvement and patient safety

Providing the NHS with information, advice and support to improve patient outcomes



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