Technical Health and Wellbeing Paper
Broads Authority Local Plan

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Norfolk County Council
Public Health

Contents

Introduction

The built and natural environment has an impact on the health and wellbeing of residents and specifically impacts the wider determinants of health and the effect this has on widening inequalities. Good health includes physical, social, and mental wellbeing going beyond simply the absence of illness and care of persons who have become ill. Health is not consistent across the population and stark inequalities often exist across population groups and small areas. Health and wellbeing are negatively correlated with levels of socio-economic deprivation, for example, those living in the most deprived areas typically face worse health inequalities compared to those living in more affluent areas. Provisions of social infrastructure is vital for vibrant neighbourhoods, which includes schools, health centres, local food shops, public buildings, local workplaces, and green space. Neighbourhoods which enable residents to have good access to goods and services and provides opportunities for social interaction can promote a feeling of community and reduce health inequalities (1,2).

The Local Plan plays an important role to support positive health and wellbeing outcomes across all parts of the Broads, ensuring the consideration of all aspects that impact on an individual's health. The model of health determinants relating to the built environment developed by Barton and Grant (figure 1) is widely used to aid understanding of the interactions between different aspects of society and the environment. It provides a holistic model of the relationship between people, their quality of life and their local and global environment, detailing the social determinants of health. Such models provide an important framework for considering the wider health impacts of development (3). The social determinants of health encompass non-medical factors such as income, education, and living conditions that significantly impact health outcomes and can lead to health inequities. These determinants play a substantial role in influencing health, accounting for 30% - 55% of health outcomes, and addressing them is essential for reducing health disparities and requires cross sector collaboration (4). This paper includes a range of indicators which build a picture of the health of residents within the Broads and will outline key principles and practical recommendations for promoting health in spatial planning.

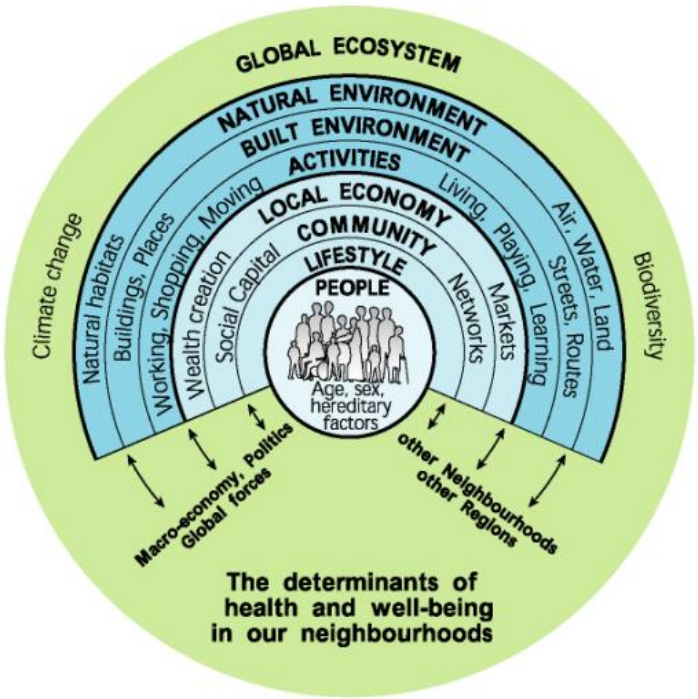

Figure 1: A health map for the local human habitat (3).

Wider Policy, Plans and Programmes

National Planning Policy Framework (5)

The National Planning Policy Framework (NPPF) is explicit in its support for healthy place shaping. It states in paragraph 91 that:

"Planning policies and decisions should aim to achieve healthy, inclusive and safe places which:

a) promote social interaction, including opportunities for meetings between people who might not otherwise come into contact with each other – for example through mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages

b) are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas

c) enable and support healthy lifestyles, especially where this would address identified local health and wellbeing needs - for example through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling".

The sections on open space and recreation and design note the influence of these on promoting healthy lifestyles and wellbeing.

NHS England Long Term Plan (6) & Putting Health into Place (7)

This aims to ensure that the nation's future health is given high regard when planning and designing places. *"Wider action on prevention will help people stay healthy and also moderate demand on the NHS. Action by the NHS is a complement to – not a substitute for – the important role of individuals, communities, government, and businesses in shaping the health of the nation".* Lessons have already been learned from healthy new town demonstrator sites around the UK and principles for healthy place making have been incorporated into the NHS 'Putting Health into Place' guidance.

Spatial Planning for Health (2) & Planning Healthy Weight Environments Guidance (8)

The guidance is published by Public Health England of which the Office for Health Improvement and Disparities (OHID) is the successor. OHID has published guidance on using the planning system to promote healthy weight. It is clear that the quality of the local environment is a vital factor in stimulating active lifestyles and enabling communities to make healthy food choices. The OHID guidance provides a template Supplementary Planning Document (SPD) as a blueprint for local authorities to guide the creation of healthy weight environments. OHID's Spatial Planning for Health provides information about how to plan places for healthy living.

Active Design: Creating Active Environments Through Planning and Design (9)

Good design should contribute positively to making places better for people, to create environments that make the active choice easy and attractive for people and communities. It includes Ten Principles of Active Design that are identified by drawing from urban design practice and practical examples to promote environments that offer individuals and communities the greatest potential to lead active and healthy lifestyles. While not all the Active Design Principles will be relevant or appropriate to all scenarios and settings, the Active Design Principles do apply equally to the design of new places and the enhancement of existing places.

Norfolk & Waveney's Transitional Health & Wellbeing Board Strategy 2022-23 (10)

Priorities:

- Driving integration
- Prioritising prevention
- Addressing inequalities
- Enabling resilient communities

Better Together for Norfolk (2021-25) (11)

'For us, levelling up is about creating the conditions for people to have good and healthy lives, regardless of who they are or where they live.'

'We do not believe we have to choose between a vibrant economy, healthy people or resilient communities – they are all interconnected. It is not the individual parts of the system that make it successful, it is the quality of the interaction between them. We want our strategy to make a difference to our county's social infrastructure, economic infrastructure and physical infrastructure.'

'We will explore new ways of working with communities and our partners, to protect and promote good health and inclusion, taking a place-based approach to tackling the causes of poor health outcomes, such as economic insecurity and low skills, quality of housing and lack of quality and access to green spaces.'

'We will continue to improve access to our natural and cultural landscapes, while encouraging residents to use green spaces and cultural assets to improve their mental health and emotional wellbeing.'

Norfolk Public Health Strategic Plan (12)

The strategic plan describes the vision, mission and priorities of Norfolk Public Health. It outlines how a wide range of positive health outcomes for Norfolk residents will be delivered throughout their lives. Key priorities include promoting healthy lifestyles, supporting people to make healthy choices and enabling the development of joined-up resilient communities.

Norfolk Director of Public Health Annual Report 2022 (13)

This year the Norfolk DPH annual report focuses on local places and the impact location has on health outcomes. 'People's health often varies from one place to another. Health and wellbeing aren't only affected by what people do – for example, eating healthy food or quitting smoking. They can also be affected by the places around us, like living in an area with low levels of crime, safe places to enjoy the outdoors, good jobs and quality housing. That's why it's important to look at what's needed in specific places to help people live longer and healthier lives – and this can vary from one place to another.'

Norfolk and Waveney Planning in Health Protocol

The Planning in Health Protocol presents a process describing how relevant NHS organisations, Norfolk & Suffolk County Council Public Health and the Norfolk and East Suffolk Local Planning Authorities jointly consult to ensure that health considerations are adequately accounted for in plan making and in planning applications and their subsequent developments. In this context, the term "health considerations" includes planning for health service provision (e.g., the provision of enough doctors' surgeries to meet population needs) as well as ensuring that health promotion is considered in the design and provision of developments (e.g. the provision of walking and cycling infrastructure, or maintenance of good air quality).

The Broads Authority Integrated Access Strategy (14)

The long term aim is to upgrade and improve the network of access points and routes that are linked to visitor facilities and include easier access for all.

- To improve access links to local facilities, settlements, and visitor destination points.
- To improve access for all in the Broads.
- To encourage sustainable travel choices such as public transport, walking, cycling and non-powered boating, and improve links between public transport provision, visitor destination points and access routes.
- To encourage provision of access routes that relieve visitor pressure on internationally designated sites, avoid disturbance of protected species and help to accommodate growth.
- To provide appropriate information on access and interpretation about recreational sites.

The Broads Data

The Broads consists of a network of rivers, lakes and marshes covering approximately 303km^2 of Norfolk and Suffolk counties. The area is characterised by broads connected by a network of navigable rivers and waterways. The Broads is a protected landscape and have a status equivalent to a National Park. The area is a largely rural setting connected by small winding country roads, although crossed by several major transportation links, including the A47 trunk road east of Norwich and the A12 south of Great Yarmouth. Wroxham and Hoveton are situated on the river Bure and considered the gateway to the Broads, with a number of other towns and villages spread across the area. Deprivation experienced by residents of rural areas may differ from that experienced by urban residents, such as poor access to services. Overall rural population health is better than their urban counterparts, but clear problems exist, including an aging population, road traffic accidents and connectivity, such as public transport and internet. Furthermore, the cost of providing services for rural residents may be considerably higher than urban residents (15). The Broads has a unique area border with none of the 80 Lower Layer Super Output Areas (LSOAs) fully situated within the Broads, therefore some of the data provided in this document are estimates based on the populations within the small areas.

Population

According to the ONS 2021 census the Broads has a population of 6,275 residents; there has been little change in the number of residents since 2011. Figure 2 shows the age and gender population breakdown within the Broads compared to England and Wales. The highest proportion of residents are in the 90+ age bracket, although there is also a greater proportion of the population aged between 50 to 90+ years than England and Wales. The average life expectancy for women and men is 84 years and 80 years respectively. Healthy Life Expectancy shows the years a person can expect to live in good health (without disability or poor health). Across Norfolk, men are expected to live to 63 years in good health, and for women 64 years meaning in the Broads, women can expect to live 20 years in poor health and for men, 17 years.

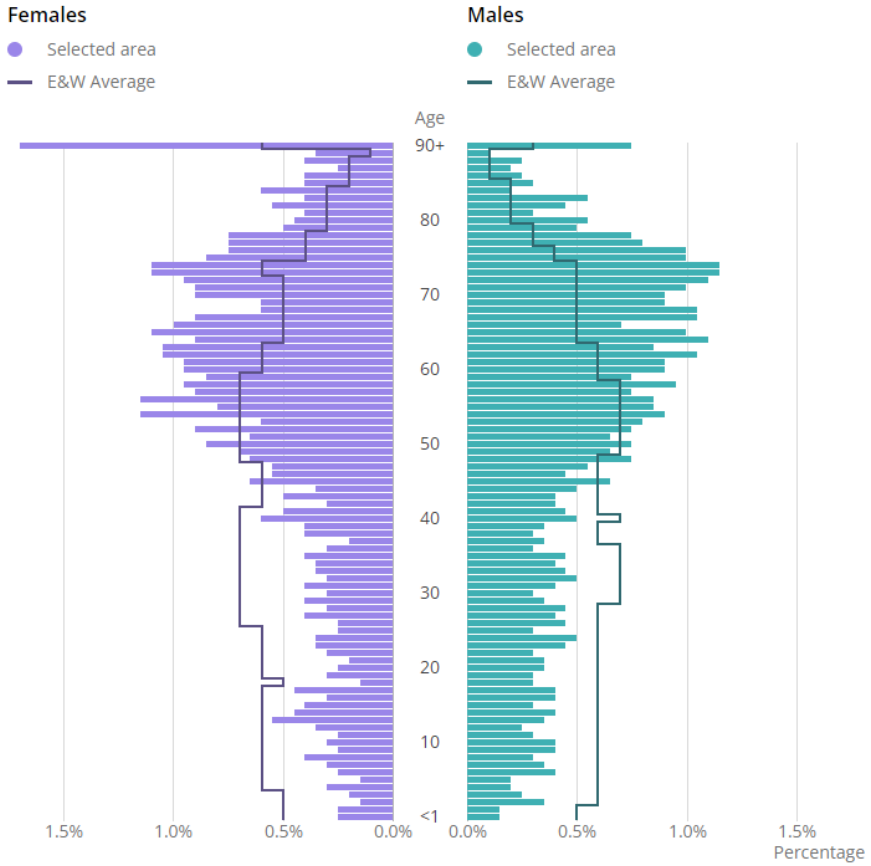

Figure 2: The Broads population age profile – ONS national parks.

The highest density of people live in Wroxham, Hoveton, Horning, Stokesby, St Olaves, Lowestoft, and Great Yarmouth. Across the whole area 94.7% of the population are White: British; compared to 88.9% in Norfolk, 87.3% in Suffolk, and 73.5% in England. Approximately 3% of the population are non-British White, mostly situated in the more densely populated areas. The Local Plan may seek to address areas with higher proportions of international residents and ethnic minorities by supporting and driving inclusive economic growth, connecting communities, inclusive services, and promoting workforce diversity (16).

General Health and Disability

Approximately 40% of the Broads population reports very good health, compared to 43.1% in Norfolk, 45.6% in Suffolk, and 48.5% in England. While 5.4% of the population report bad or very bad health, compared to 5.2% for England. There has been a small increase in the proportion of the population reporting bad or very bad general health in the Broads from 2011 to 2021, however the proportion of residents reporting bad or very bad health in 2021, is the same as the Norfolk average. When age standardisation is applied to general health, due to the significant older population, 49.9% of the population report very good health and 0.8% report very bad health, better than the comparison areas. Furthermore 22% of the Broads residents are registered disabled under the Equality Act (2010), compared to 20.1% in Norfolk, 18.3% in Suffolk, and 17.3% in England. Again, when age standardisation is applied, 17.9% of the population is disabled; this is similar to Suffolk and England, and less than Norfolk, 19%. It is important to recognise the population and health of an area to inform a Local Plan. By adhering to inclusive design principles, promoting accessible housing, and encouraging mixed-use developments, the Local Plan can create environments that cater to diverse abilities. Accessible transportation, pedestrian infrastructure, and public spaces are crucial for mobility, while involving disabled residents in the planning process ensures their needs are addressed (2).

Deprivation

Health inequalities exist across the UK and are about the differences in the status of people's health. The term also refers to the care that people receive and the opportunities they have to lead healthy lives. Health inequalities therefore involves differences in health status, access to care, quality and experiences of care, behavioural risk to health and wider determinants of health. Life expectancy is closely related to people's socio-economic circumstances, with the more affluent living longer healthier lives and the less affluent living shorter and unhealthy lives. Health inequalities can be apparent at birth depending on the relative deprivation of the area in which residents were born (17). This is evidenced by the Marmot Review that draws attention to social factors such as experiences in early childhood, housing, education, income, and the built environment as predictors of ill health. Tackling and improving these social factors can have substantial impacts on a population's health, and in turn reduce unfair and avoidable health inequalities (18).

The index of multiple deprivation (IMD) is a way of summarising how deprived an area is based on levels of income, employment, education, and crime. The approximate overall IMD score for the Broads is 19.1. Norfolk has an IMD score of 21.2, Suffolk, 18.5, and England, 21.7.

In addition to this, health inequalities and deprivation are not spread evenly across the Broads. There are 6 LSOAs that are in the top 20% most deprived neighbourhoods in England, as shown in figure 3, however only 3% of the Broads population, approximately 190 people, live in these neighbourhoods. There is a range of deprivation seen across the area, with large areas in IMD deciles 3 – 6, showing a largely average deprivation level in line with England. Child poverty and older people in deprivation is significantly lower than Norfolk, Suffolk, and England. Fuel poverty has increasingly become a problem across England with recent rises in energy costs (19), putting further strains on residents. Sub-regional fuel poverty data 2022, identifies 7 LSOAs in the Broads that are in the 10% highest proportion of households in fuel poverty; these include areas such as Great Yarmouth, Bungay, Horsey and Dilham.

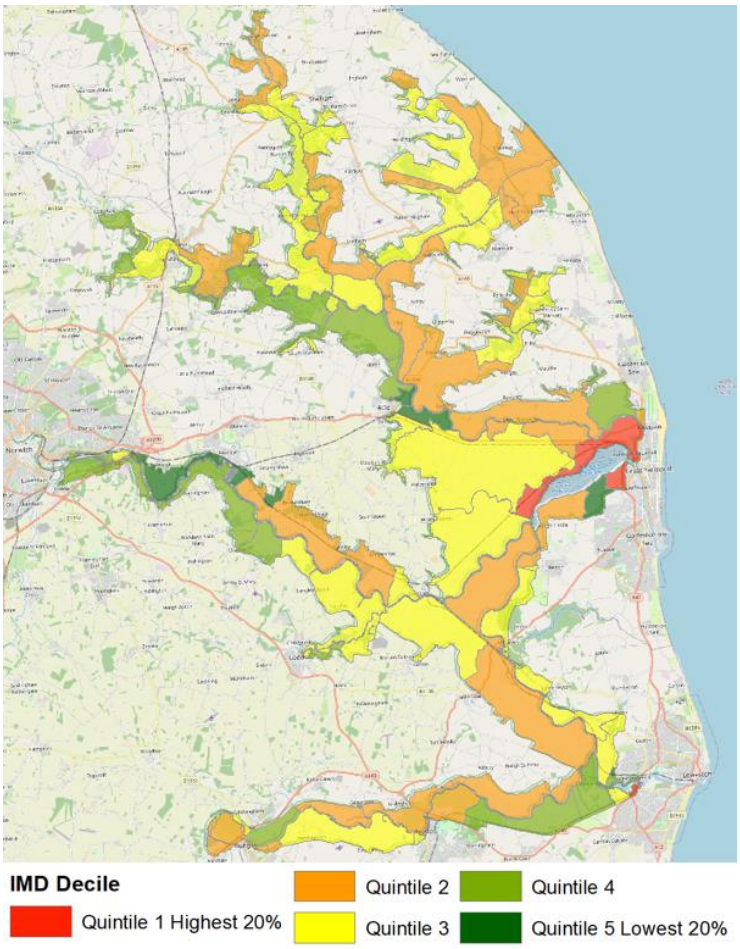

Figure 3: : Distribution of the Broads IMD deciles, with the red areas highlighting the 20% most deprived LSOAs across England – IMD 2019.

Spatial planning is a one of the mechanisms used to ensure negative impacts on health and wellbeing are avoided and positive impacts maximised, while also playing a vital role in addressing the health inequalities that exist within the area. People's behaviour is a major determinant of how healthy they are. Smoking, poor diet, physical inactivity and harmful consumption of alcohol are leading risk factors that drive preventable ill health and premature mortality in England. These factors are more common in some parts of the population than others, and the distribution is influenced by deprivation, income, gender, and ethnicity, and is concentrated in the most disadvantaged groups. Health related behaviours are shaped by cultural, social, and material circumstances. The environment people live in can make it harder for people to move away from unhealthy behaviours. This can include factors like income, education, access to green space and healthy food, the work people do and the homes they live in (20). Addressing these wider socio-economic inequalities through targeted intervention and careful planning, is a crucial part of reducing health inequalities.

Access to healthcare

Access to health care is a complex concept and goes beyond geographical distance from a health care service, however it still plays an important role in reducing health inequalities. Although there are no GP practices that are located within the Broads boundary, there are 32 within 1.5km of the boundary, with 70% of households within 3km of the associated GPs. Figure 4 shows the location of the GP practices associated with the Broads and average travel time by public transport or walking to the nearest GP practice, from 2019 journey time statistics. The areas which have the poorest access to a GP include, Stalham and Sea Palling, Thurlton, Haddiscoe and Geldeston, and Blofield, Lingwood and Upton.

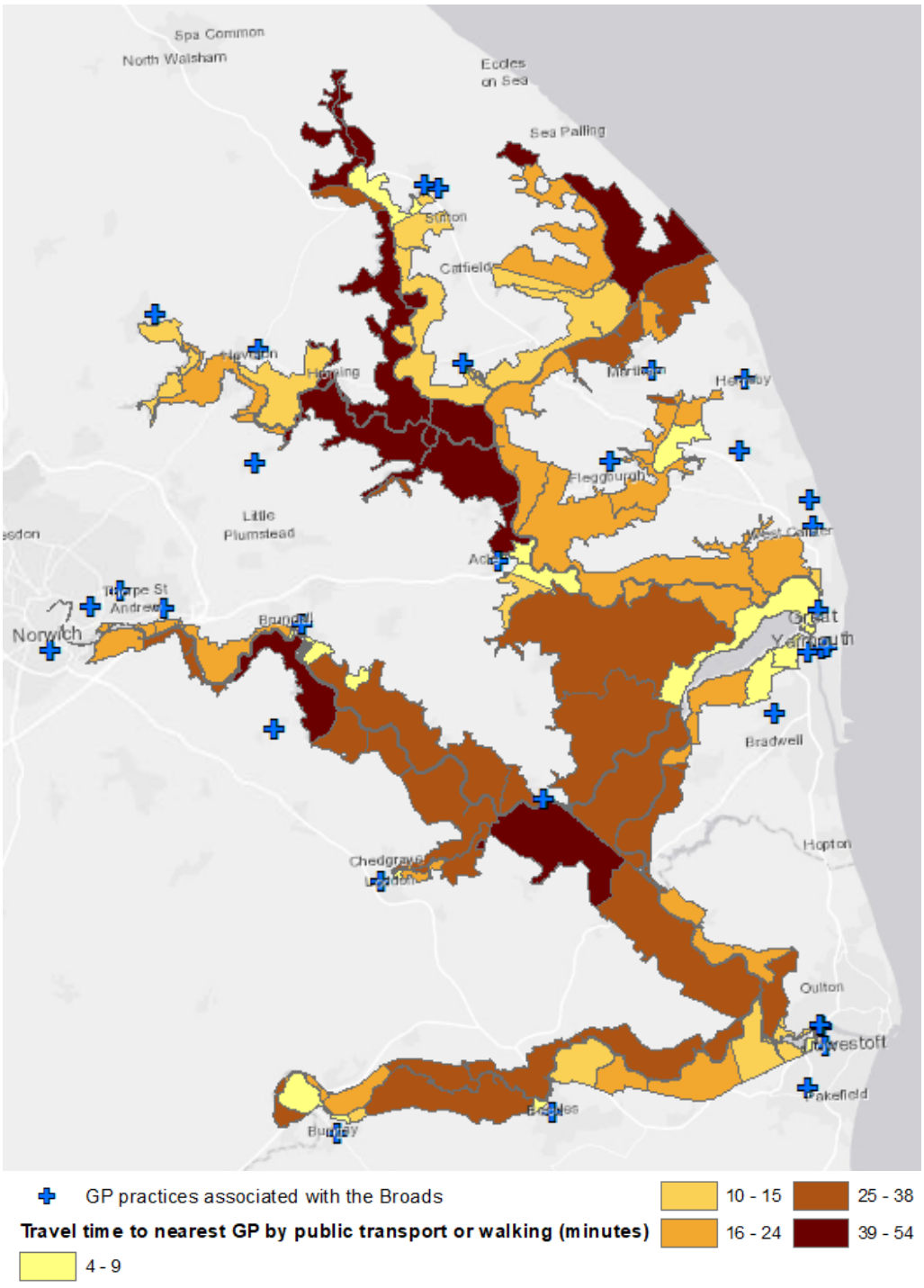

Figure 4: Map of GP practices within 1.5km of the Broads boundary considered to serve residents within the Broads area and travel time to the nearest GP by public transport or walking – Shape Atlas.

Active Travel

Inactivity and sedentary lifestyles are creating a serious public health challenge; the UK population is 20% less active than in the 1960s (21). Over the past 60 years, the design of urban environments and transport systems have favoured private motorised transport. Whilst this has bought some benefits, it has also imposed high health and societal costs. Walking and cycling are the most effective ways to promote routine physical activity. Transport systems and the wider built environment play a crucial role in promoting these behaviours. Increasing residents' participation in active travel can improve physical and mental health, cognitive function, increase social interaction, while also providing financial savings and environmental benefits, including the improvement of air quality that can impact on population health (22).

Travelling to work provides a good opportunity for residents to engage in active travel. The 2021 ONS census found that across the Broads 4.9% of residents walk and 1.8% cycle to their workplace; whereas in Norfolk, Suffolk, and England the average proportion of residents travelling by foot or bicycle to work is 9% - 11%. However, 35.1% of the Broads residents work from home, compared to an average of 31.5% working from home across England, 25.4% in Norfolk and 26.5% in Suffolk. Other opportunities for active travel also exist including shopping and dropping off children at school. A survey across England found that 66% of adults agreed or strongly agreed roads are too dangerous to cycle on (23). Figure 5 shows the number of people that have been killed or seriously injured on roads within the Broads from 2018 – 2023, with an average of 10.8 across 5 years. Most killed or seriously injured casualties have happened on rural roads, with a larger proportion occurring on the A47 between Acle and Great Yarmouth. The year 2020 had a significantly higher number of killed or seriously injured casualties than the 5 year comparators.

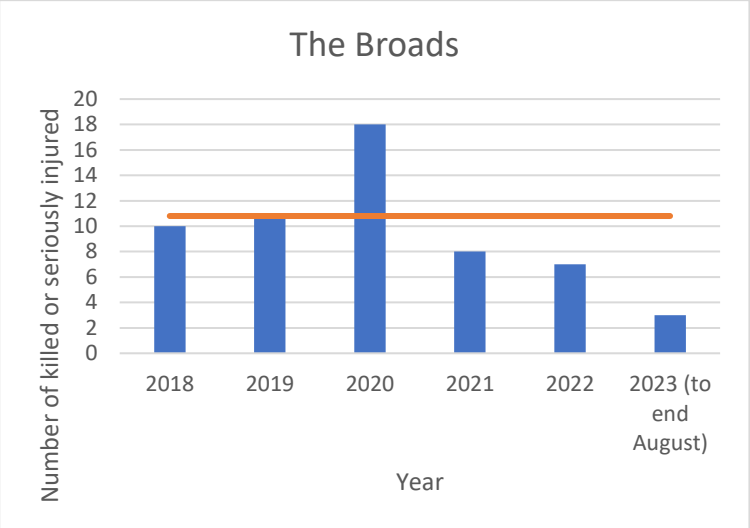

Figure 5: Killed or seriously injured that happened on roads within the Broads since 2018. The orange line represents the 5 year average - reported road casualties.

The Local Plan can influence active travel by implementing a range of measures and initiatives aimed at promoting and encouraging walking, cycling, and other forms of physical activity for transportation. One approach could be to prioritise the development of safe and well-connected walking and cycling infrastructure, including dedicated cycle lanes, pedestrian pathways, and green corridors, to make active travel more accessible and appealing to residents. The Local Plan can also focus on creating pedestrian-friendly streets and traffic calming measures to improve safety. Additionally, the Local Plan could also support the establishment of bike-sharing schemes, cycle hubs, and secure bike parking facilities to enhance the convenience of cycling as a mode of transportation. Collaborations with local schools and workplaces to implement travel plans encouraging active commuting can also play a crucial role in promoting a culture of active travel within the community. The Local Plan should include road safety measures to encourage active travel and reduce casualties on the road (24).

Air Quality

The quality of air people are exposed to, impacts health and is the largest environmental risk to public health. Air pollution originates from sources including transport, industrial processes, farming, energy generation and domestic heating. Concentrations of air pollutants can vary both temporally and spatially but are typically higher close to the source of pollution. In urban areas especially, concentrations of particulate matter and NO_2 can be particularly high due to increased industry, housing, and traffic. The annual mortality of human-made air pollution in the UK is estimated between 28,000 and 36,000 every year. Air pollution can cause and worsen health effects in all individuals, particularly in vulnerable populations and those with pre-existing health conditions. Long-term exposure to air pollution can cause chronic conditions such as cardiovascular and respiratory diseases as well as lung cancer, leading to reduced life expectancy. Short-

term increases in levels of air pollution can also cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in respiratory and cardiovascular hospital admissions and mortality. More recent research has associated air pollution with dementia and cognitive decline; diabetes and affecting unborn children leading to various birth outcomes such as low birth weight and developmental problems (25).

Air quality in the Broads area is currently generally very good, with no air quality management areas currently declared for breaching government objective threshold limits for air pollutants. However, there are areas where congested traffic has adverse air quality impacts. The concentration of $PM_{2.5}$ has decreased both locally and nationally over the past 5 years (26). Figure 6 shows an estimated measure of the concentration of four air pollutants. Urban areas tend to have a higher air quality indicator value than rural areas, such as Norwich, Wroxham, Lowestoft, and Great Yarmouth. The National Atmospheric Emissions Inventory indicates there is $1km^2$ within the Broads that has >4 unit tonnes of $PM_{2.5}$, where Cantley Sugar Factory is located. The Broads Local Plan can help to address air quality issues using a variety of measures that influence green and active travel infrastructure, prioritise road safety and discourage travel in private cars. The Local Plan could support the change in the uptake of low emission vehicles and encourage investment in clean public transport. Increased green infrastructure betters' health inequalities in urban areas and promote health and wellbeing, as well as improving air quality related public health outcomes (27).

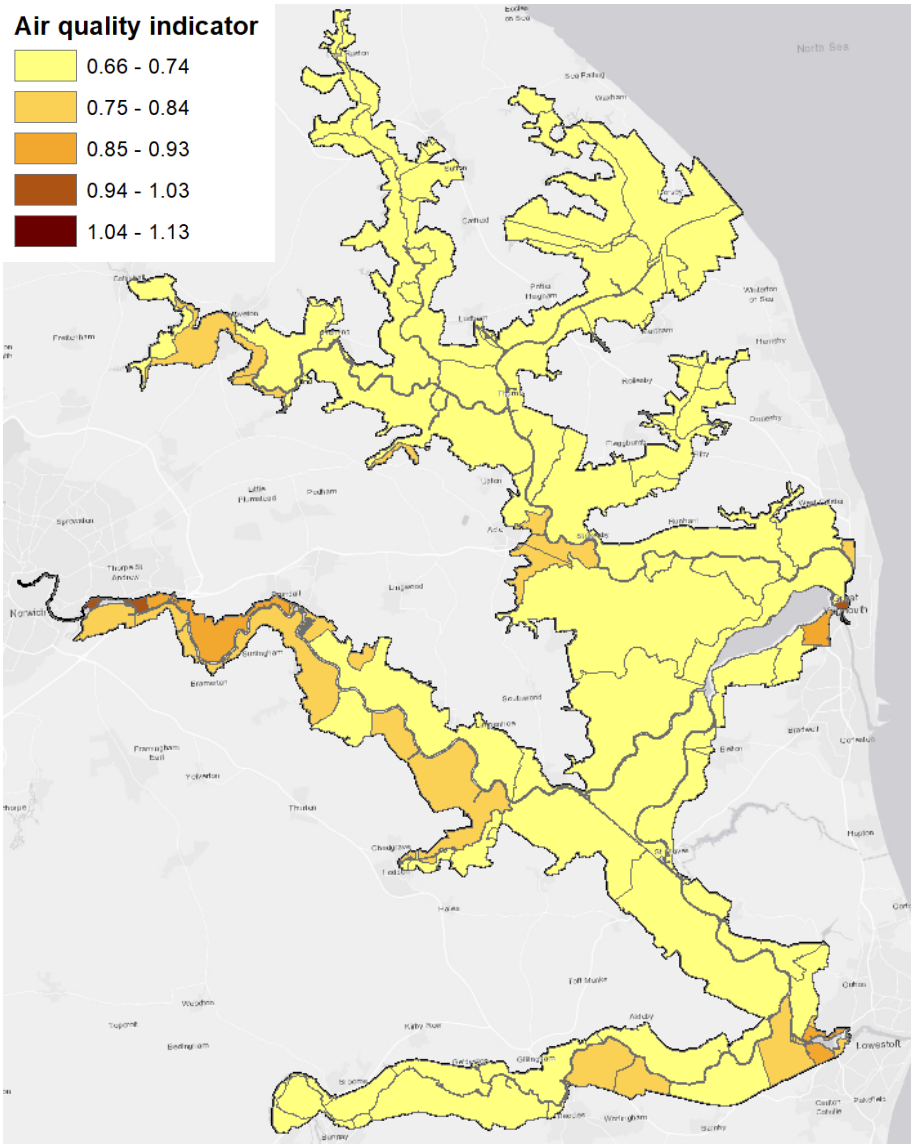

Figure 6: A measure of the estimated concentration of four air pollutants (nitrogen dioxide, benzene, sulphur dioxide and particulates) for LSOAs associated with the Broads, based on data from the UK Air Information Resource. Light yellow indicate low scoring air pollution areas and dark brown high scoring areas - Norfolk Insight.

Alcohol Consumption

Alcohol is England's second biggest cause of premature deaths behind tobacco. The cost of alcohol to society is estimated at £21 billion; this includes alcohol-related crime, cost to NHS and lost productivity through unemployment and sickness. Men and women should limit their intake to no more than 14 units a week[1]. Alcohol consumption is a contributing factor to hospital admissions and death from a diverse range of conditions, including cancer and liver disease (28).

From 2016/17 - 2021/22 across wards associated with the Broads, the median standardised admission ratio (SAR) for alcohol attributable conditions hospital admissions (narrow definition) was 88, where England represents a value of 100. This is similar to Suffolk, 91.5; however, Norfolk has a significantly higher value of 105. St Benet's and Hoveton and Tunstead are both wards associated with the Broads that are in the top 20% of wards in Norfolk for hospital admission for alcohol attributable conditions (narrow definition), as well as Great Yarmouth. The impact of harmful drinking and alcohol dependence is much greater for those experiencing the highest levels of deprivation (28). Spatial planning also plays a role in creating attractive public spaces that encourage social interaction and recreational activities as an alternative to alcohol consumption, while also incentivising the development of facilities that promote healthy lifestyles. By understanding alcohol usage across the Broads, violence and alcohol misuse can start to be recognised, addressed, and designed out of areas (29).

Climate Resilience

Climate change is having a largely negative impact on the health and wellbeing of the UK population. Vulnerable people, including the very young and old are particularly susceptible to the risks and outcomes of climate change, such as dehydration and overheating in hot weather. Hot summers and prolonged heat waves also threaten those with pre-existing health conditions, such as heart and lung disease (30). The Broads is already facing flooding challenges; these are likely to be exacerbated further with the impacts of climate change. The immediate dangers to physical health from flood events are often highly visible such as drowning, physical trauma and injuries and infection, with some longer term impacts such as respiratory disease from mould or damp in the home. Mental health impacts are often less associated with flooding and coastal change, however those directly impacted by flooding are 6 times more likely to have PTSD, depression, and anxiety. The impacts of climate change are likely to be a particular issue for those already in poor mental health (31).

Climate related risks are increased for those residents living in high socio-economic deprivation. Those living in deprived areas of the Broads are more likely to have poor health and become impacted by climate change stresses. Residents living in areas of deprivation are less likely to be able to adapt to climate change, for example tenants, in either social or private rented housing, may have limited ability to retrofit flood resilience measures due to unsympathetic or uncooperative landlords, or simply not have the funds to afford flood mitigation methods (32). Residents with poor quality housing are likely to be at further risk (33). Planning plays a crucial role in building community resilience in the Broads; developments that are being built today will need to be able to function and respond to future climate change projections. Developments will need to have the ability to keep residents cool during warm summers to reduce the risk of heat stress and avoid areas at highest risk of flooding (existing and future) (5), while also being built with flood resistance and resilience measures to reduce both physical and mental health impacts. Increasing green infrastructure in urban areas has a cooling effect on the immediate environment, by providing increased shade, and reduces the amount of heat absorbed by surface retaining heat (urban heat warming), while also mitigating the flood risk of an area (34).

[1] 1 unit is equivalent to a single shot of spirit. 2 units is equivalent to a pint of lower-strength beer. 3 units is equivalent to a pint of higher-strength beer – Alcohol units.

Connectivity

The quality of transport infrastructure and adequacy of transport services directly affects health, for example by enabling active modes of travel that have health benefits or reducing road accidents and harmful emissions. A public transport system that is easily accessible, reliable, and affordable contributes to life satisfaction and wellbeing, as it enables access to work, friends and family, as well as health-supporting facilities such as schools, colleges, parks, libraries and health centres (35). Across the Broads 84% of households can access a bus stop within 1km. The areas with the least access to a bus stop are Irstead and Bastwick.

A fast and reliable internet connection can support people's mental health and wellbeing by enabling social connections, reduced feeling of isolation, while also providing opportunities for entertainment and relaxation. Internet connectivity can also facilitate access to health information, telemedicine services, and online support groups, which can enhance health literacy and promote healthier lifestyles. Internet access significantly reduces health inequality across different income groups and increases the average health condition (36). Superfast broadband is considered to be internet speeds of 30Mbit/s or higher. Across the Broads, 8.6% of households are unable to receive superfast broadband (Ofcom Connected Nations). Figure 7 shows the Broads internet connectivity compared to Norfolk and Suffolk; the proportion of households that do not have access to superfast broadband is significantly more than both Norfolk and Suffolk. Figure 8 shows the distribution of households unable to receive 30Mbit/s. Only 25% of households in West Somerton can receive above 30Mbit/s internet speeds, with approximately 50% in areas such as Thorpe and Horsey.

Spatial planning plays an important role in improving and maintaining connectivity across an area. Improvements in active travel infrastructure such as walking and cycling routes and inclusive bus stop design, could encourage usage and improve access (37). The Local Plan could consider the proximity of new housing developments to network distribution points, reducing the cost required to connect new homes or ensure broadband infrastructure can be easily deployed in allocated sites if sufficient resources are not already available. Spatial planning could incorporate compliance requirements, such as the need for a connectivity plan, into the approval process for new building developments to ensure they meet current broadband connectivity need (38).

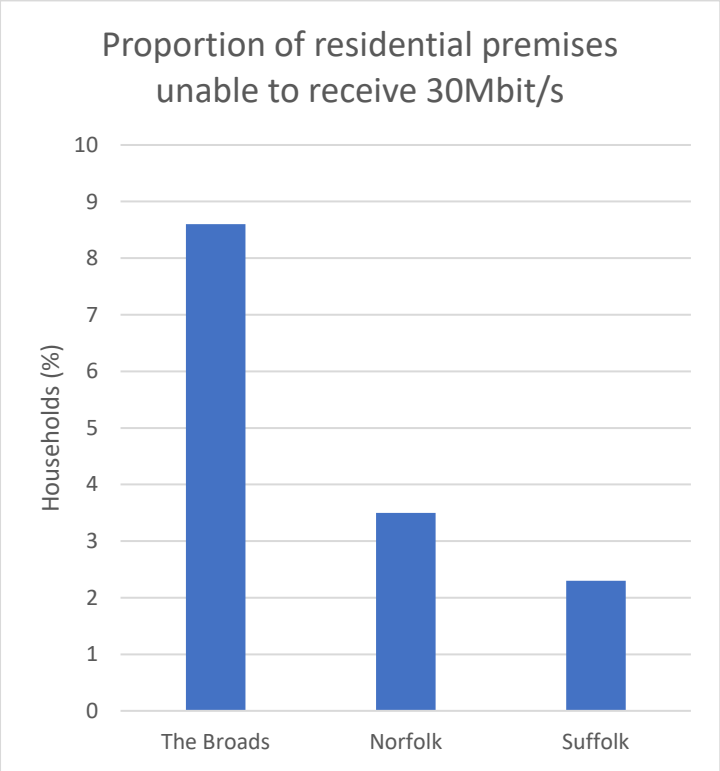

Figure 8: Comparison of the Broads against Norfolk and Suffolk of households unable to receive superfast broadband – Ofcom Connected Nations.

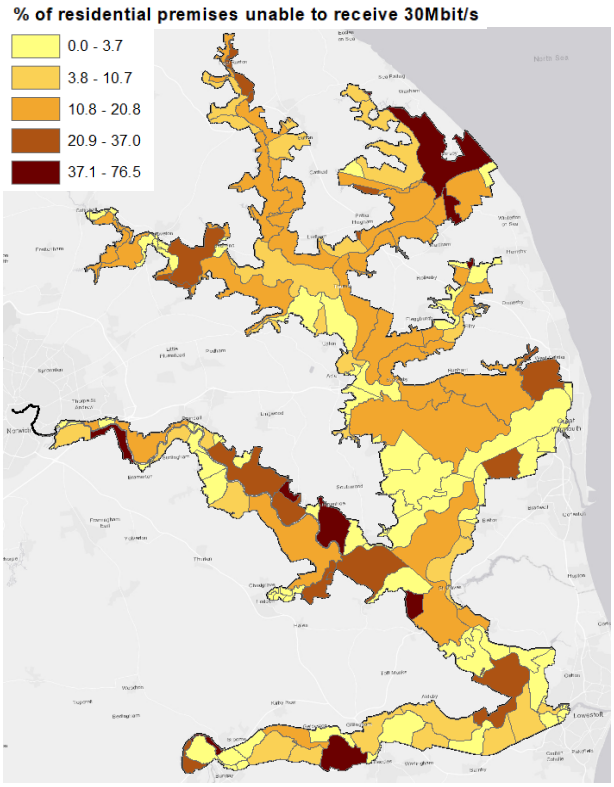

Figure 7: Distribution of output areas in the Broads with the proportion of households unable to receive superfast broadband – Ofcom Connected Nations.

Crime

Anyone can be affected by crime and violence either directly or indirectly. Low-income neighbourhoods are more likely to be impacted by crime than higher income neighbourhoods (39). High levels of crime can increase anxiety, fear and stress in individuals and communities, which can lead to increased blood pressure and heart disease. Residents may feel they are unable to go to certain areas or avoid going out and socialising, leading to social isolation and depression. Crime and the fear of crime could also reduce levels of physical activity and reduce use of active travel to access work and school (40).

Crime levels across the whole of the Broads are lower than Norfolk, Suffolk, and England. There were 10,631 reported crimes in LSOAs associated with the Broads between July 2022 and June 2023 (Police UK). The most common crime type was violence and sexual offences. Figure 9 shows the rate of all crimes in LSOAs associated with the Broads; urban areas, such as Norwich, Lowestoft, Great Yarmouth, Heckingham and Horning are highlighted as having the highest rates, although high counts are seen in some rural areas.

The Local Plan can play an important role in crime reduction in new developments by ensuring the crimes are “designed out”. By designing developments in ways that promote community safety and involve local communities in the development of the Local Plan, will allow a better understanding of their crime and safety concerns, which in turn may help in the prevention of crime. Improving infrastructure to increase community walkability and active travel options, using design to improve overlooking, and ensuring routes are well lit can boost the use of public and private spaces, which can create safer and more vibrant places. Dark skies is an important asset of the Broads and unnecessary form of artificial outdoor lighting needs to be designed carefully, justified and only for essential use. There is a positive relationship between increased green space and reduced crime levels, while also encouraging physical activity and social connections in a neighbourhood (41).

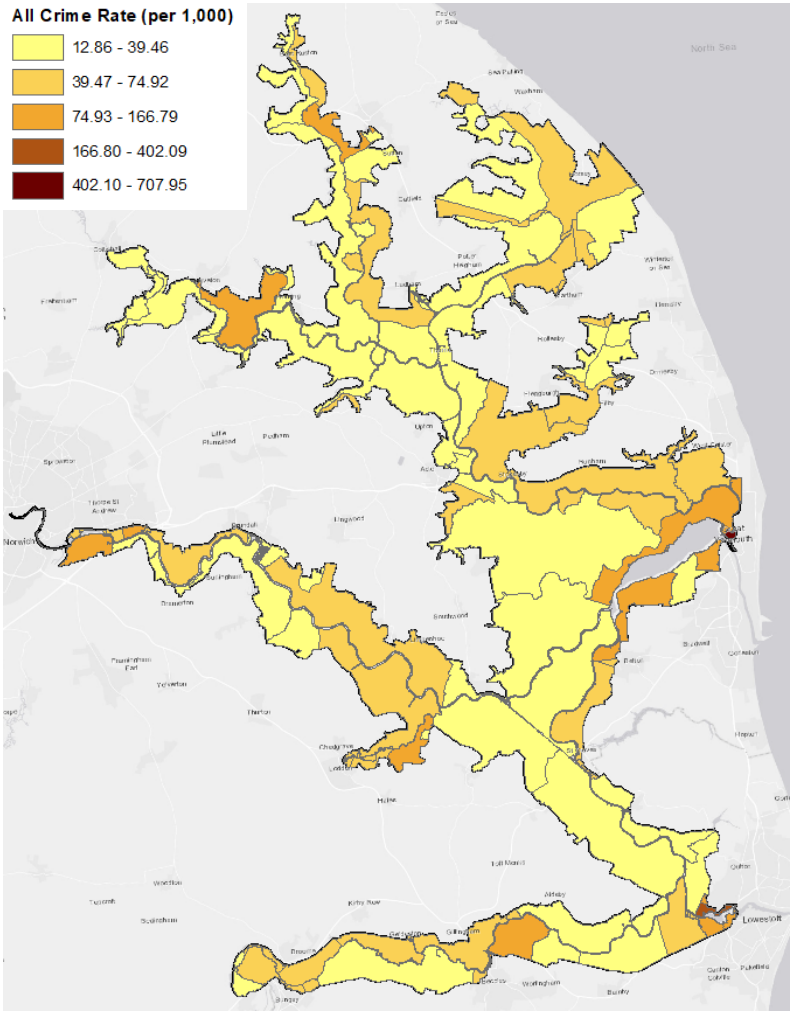

Figure 9: All LSOA crime rates between June 2022 and May 2023 within the Broads - Norfolk insight.

Dementia and Frailty

The Broads has an aging population. Between the last two censuses (2011-2021), the median age of the Broads increased by four years, from 53 to 57. This is significantly higher than the median age of the East of England, 41, and England, 40. The Broads has the highest proportion of the population aged 65 and over, 36.7%, and aged 90 and over, 2.4%, compared to other National Parks. An aging population brings with it different health challenges of people living longer. For a significant number of older people, advancing age is associated with frailty and dementia. Frailty is a reduction in physical capacity, and can result in a greater risk of falls, disability, admission to hospital or the need for long term care. Dementia is an impaired ability to remember, think or make decisions that interferes with doing everyday activities (42).

Falls represent the most frequent and serious type of accident in people aged 65 and over. They are the main cause of disability and leading cause of death from injury amongst people aged over 75 (43,44). From 2016/17 - 2021/22 across wards associated with the Broads, the median SAR value for emergency hospital admission for hip fractures in people aged 65 and over is 91.2. Rockland and Wroxham are the worst performing wards, with a SAR of 117.1 and 115.9. The best performing ward is St Benet's, 59.7. The emergency admissions for hip fractures SAR value of Norfolk is 97.6, and Suffolk is 94.7.

Dementia is the main cause of later life disability. The GP practices associated with the Broads have a dementia prevalence of 1.1% (2022/23 QOF prevalence). Across Norfolk and Waveney, the dementia prevalence is 0.97% and the England average prevalence is 0.76%. Across the GP practices, 75% have a higher proportion of patients with dementia than England. The areas that see the highest prevalence of dementia is Ludham, Bungay and Brundall. Higher environmental exposure to fine particulate matter ($PM_{2.5}$) is associated with an increased risk of dementia (45). Dementia prevalence is expected to increase in all Norfolk districts by 2030 (46).

The consideration of the health of older people in the Local Plan is essential to meet the needs of an aging population. This can be done by supporting the development of quality green space, such as accessible paths and well-placed benches; this can influence eating and sleeping patterns and the fitness and mobility of people with dementia, while also providing opportunities for social interaction. Having access to services such as local shops and health services within easy, safe, and comfortable walking distances contributes to people with dementia being able to live independent and fulfilling lives for longer. It is also important to consider the significant role that consistency and familiarity plays in giving people confidence and helping them to feel safe. This can be done by having obvious sign posting and clear lines of sight through a development. The Local Plan can also consider the allocation of supported living communities across the Broads; careful consideration must be given to the design and location (47).

Economic Activity

Adults spend a large proportion of their time in work; therefore, jobs and workplaces can have a big impact on the health and wellbeing of an individual. Employment, and the lack of it, can also directly or indirectly impact families and communities. Good work is characterised by a safe environment, security, fulfilling tasks, good line management and communication. It improves health and wellbeing across people's lives and improves quality of life through income, social interaction, identity, and purpose. Conversely, unemployment is linked to bad health and increased risk of mortality and morbidity, including cardiovascular disease, poor mental health and life limiting long-term illness (48).

Figure 10 shows the economic activity of the Broads and comparison areas collected form the 2021 ONS census. In the Broads, 49.2% of residents are economically active, compared to 53.8% in Norfolk, 56.3% in Suffolk, and 57.4% in England. Across all areas retired residents makes up the highest proportion of economically inactive residents. In the Broads 37.3% of residents are retired, compared to 28.0% in Norfolk, 27.1% in Suffolk and 21.5% in England. A further 3.1% of residents are long-term sick or disabled and 3.9% are looking after home or family.

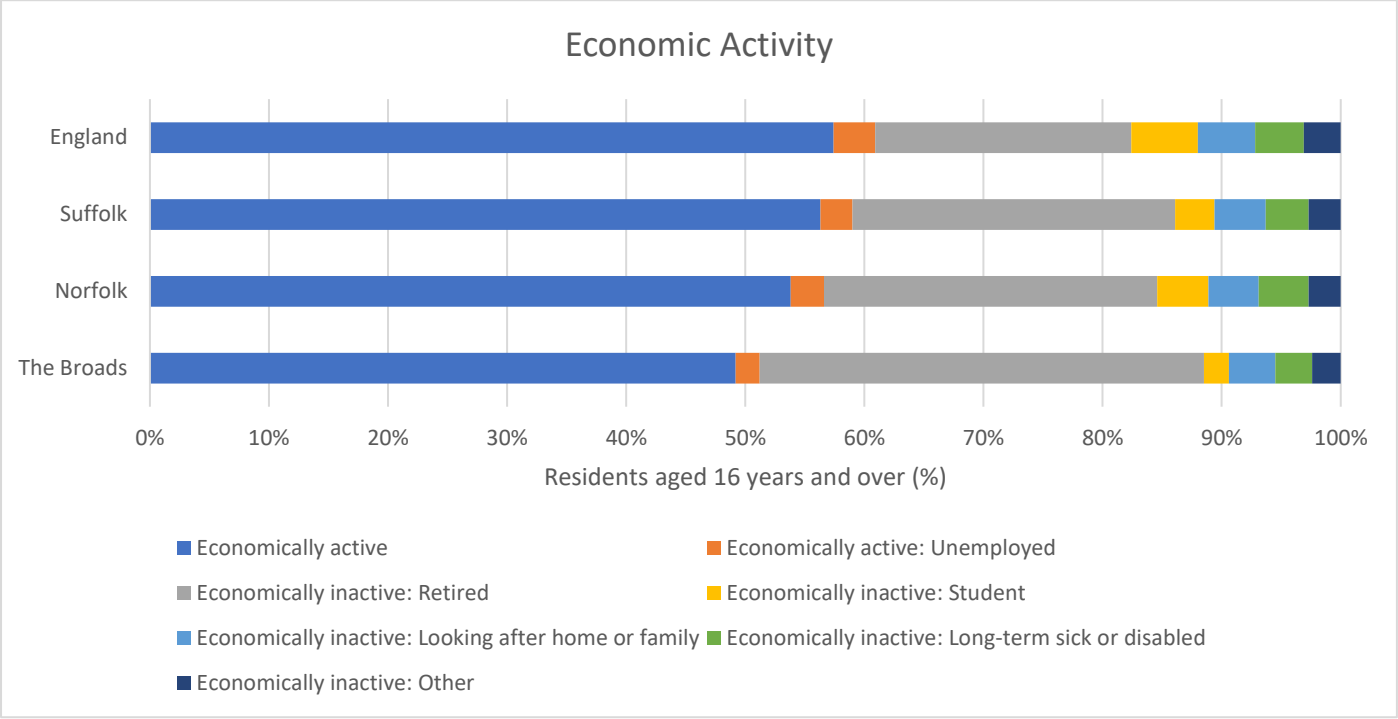

Figure 10: Economic status of residents in the Broads, Norfolk, Suffolk, and England – ONS census 2021.

Figure 11 shows small area estimates of residents within the Broads that are economically inactive. Hoveton, Horning and Potter Heigham have 56% of the population that are economically inactive. The industry most residents work in is human health and social work, 13.3%, wholesale and retail trade, 12.8%, and construction, 10%. Construction has seen the biggest industry increase from 7.8% in 2011. The smallest proportion of residents work in financial and insurance, 2.9%, and real estate activities, 1.9%. From 2020 to 2021 there was 9.6% of the population that had a different address within the UK and 0.6% outside of the UK; this can lead to an influx of skills to the area and encourage employment opportunities. The Local Plan plays a role in influencing the availability of a range of employment opportunities by ensuring they are accessible using quality sustainable travel means (49), for example the development of active travel methods as a primary transport choice. This could attract more people to the area for work or reduce the number of working residents moving away.

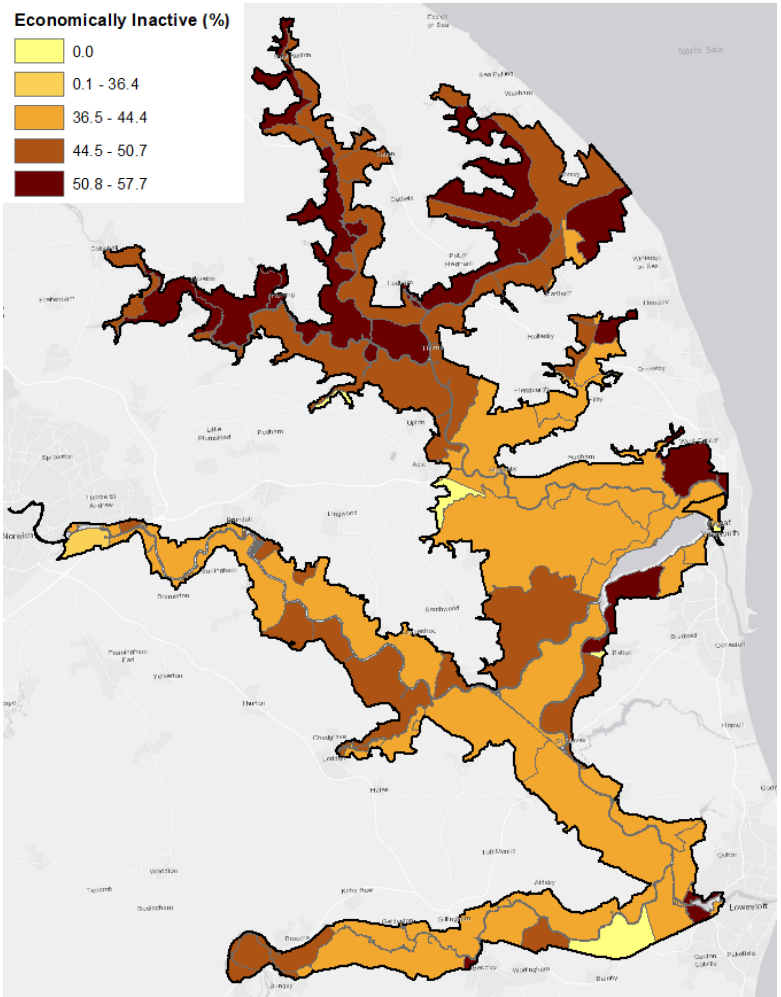

Figure 11: Distribution of economically inactive residents for LSOAs associated with the Broads - ONS Census 2021.

Education

By the age of 30 those with the highest level of education are expected to live four years longer than those with the lowest levels of education (50). Good education helps to build supportive social connections, access to good work, life-long learning and problem solving and feeling empowered and valued. The links of good education to health outcomes include being able to afford a good quality of life, develop life-long healthy habits, manage and limit exposure to life's challenges and to live and work in safe healthy environments (51).

The 2021 ONS census states that in the Broads 18.1% of 16 year olds and over have no qualifications, compared to 20.4% in Norfolk, and 19.7% in Suffolk, and the same as national. In the academic year 2020/21, 10.1% of residents are either school children or full-time students. In 2019/20 across Norfolk 59.6% of children reached the expected standards in reading, writing and mathematics at the end of primary school (key stage 2), which is significantly lower than the regional, 63.6%, and national, 65.3%, average. While 63% of Norfolk children gain a grade 4 or above in English and Maths at GCSE in 2019, compared to 65.9% in England. Filby Primary School is the only school that sits within the Broads boundary, which indicates a need for children to travel to an education setting and suggests opportunities for the Local Plan to influence accessibility. Figure 12 shows a map of primary, secondary, special educational needs and higher education establishments. The map shows that although the Broads area itself has only 1 school within its boundary area, there are many schools in the surrounding vicinity that can serve the residents. The Broads also has access to a number of higher and further education sites in Norwich, Great Yarmouth and Lowestoft.

The Local Plan can have some bearing on education within the Broads by ensuring families and children have good access to education facilities by considering transport infrastructure in new developments. The development of learning centres, that include vocational training and educational opportunities, will encourage individuals to continue growing, develop skills and ability and stay engaged with their community (51). This can be achieved with the allocation of sites for new developments or expanding the capacity of existing developments.

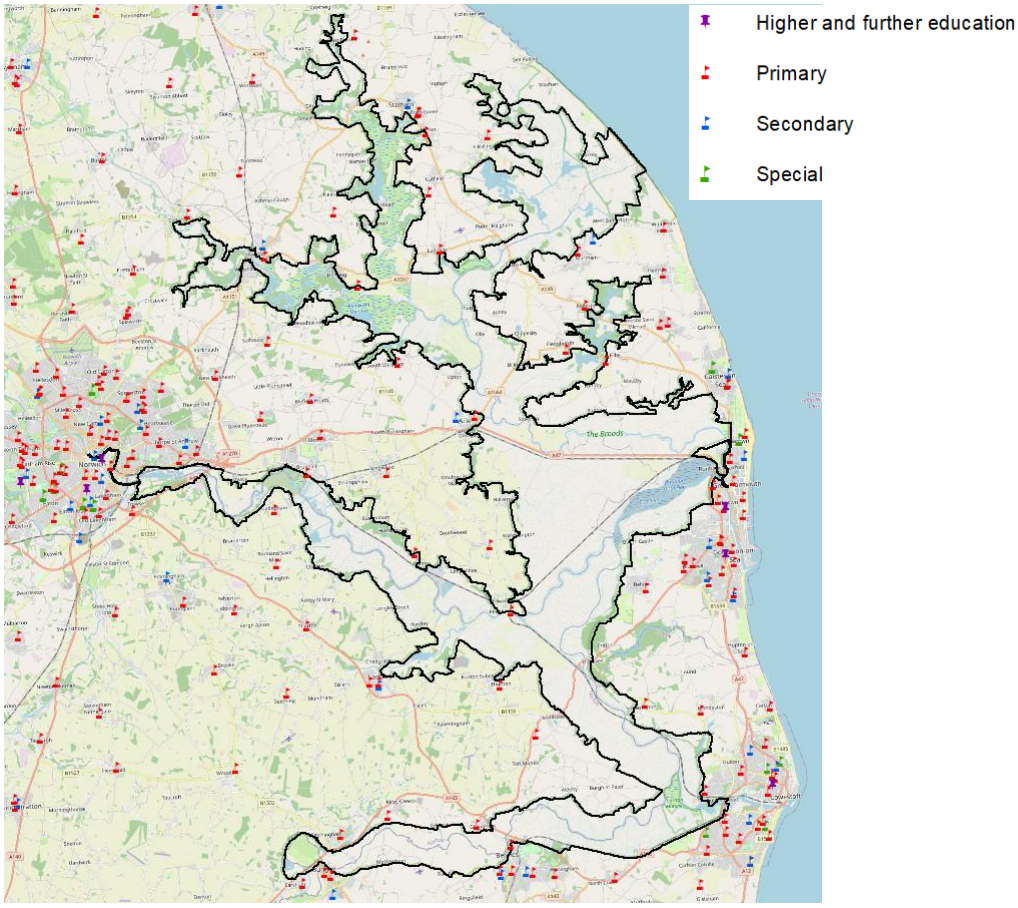

Figure 12: Map showing the location of different education settings in the surrounding area of the Broads – School location data.

Green and Blue Space

Green spaces such as parks, woodland, fields, and allotments, are increasingly being recognised as an important asset for supporting health and wellbeing. Living in a greener environment can promote and protect good health, aid in recovery from illness and help with managing poor health. Blue space includes rivers, lakes, beaches and the sea and offers health benefits similar to green space, although blue space is generally used differently, such as alternative recreational activities (52). Access to green space can increase physical activity, while greater exposure has a range of more favourable physiological outcomes (53) and is also associated with better mental health and wellbeing including reduced levels of depression and anxiety (54). Green space can help to bind communities together, reduce loneliness, and mitigate the negative effects of air pollution, excessive noise, heat, and flooding. Disadvantaged groups gain a larger health benefit and have reduced socio-economic related inequalities in health when living in greener communities. Green environments can also provide opportunities for local food growing, which can help promote healthy diets and active lifestyles (55).

Norfolk and Suffolk are generally rural counties and as such has good access to green space. Generally, access to green space is worse in urban areas such as Norwich, Great Yarmouth, and Lowestoft and better in rural areas. The ONS produce estimates for LSOAs for the average distance to the nearest parks or public gardens. Figure 13 shows the average distance to the nearest park or playing field according to LSOAs associated with the Broads. The national average of distance to parks and playing fields is 385.46m and in the East of England this increases to 1348.52m. According to the ONS data set the average distance to the nearest park or playing field within the Broads is 536.03m. The areas with the worst access to parks or playing fields are in East Ruston, West Somerton and Horsey. Both formal and informal green space have similar health benefits. These estimates do not consider footpaths and can therefore be considered underestimates of the true value of accessible green space. Natural England's Green Infrastructure Framework released in January 2023, attempts to map all accessible green space including some public rights of way. The mapping includes Access to Natural Greenspace Standards analysis (ANGSt) to identify areas that meet the Natural England Framework for accessible green space (56). The analysis shows large areas of the Broads as having low levels of accessible green space. OS map data of the Broads shows a variety of footpaths and rivers that connect residents with the natural environment; it is therefore essential that local insight is considered when making planning decisions. The Broads is a unique area that provides a variety of opportunities to access blue space. Paddle crafts can be used to discover the area and get closer to the wildlife. Figure 14 shows a map of blue space. Approximately 60% of homes in the Broads are within 1km of a slipway or launch point and provides an alternative opportunity to engage with the natural environment.

The Local Plan can influence the health and wellbeing of residents by increasing the amount, quality, or accessibility to green space. Individuals are more likely to interact with green space when it is of high quality. The government has developed a set of national green infrastructure standards to establish a common understanding of the quality required to meet local needs. Quality of green space can be considered in two ways. Firstly, the ecological and biodiversity levels. Increased ecological quality contributes to better mental health, increased health-promoting behaviours, and prevalence of good health. Secondly, the condition of the space. This is a measure of how well the site is maintained and the amenities it offers, making it safe, attractive, and welcoming to visitors. Inadequate maintenance of sites, such as poor footpath quality and cleanliness influence the use of these spaces (56). By prioritising improved access and inclusivity to green space and creating greener communities especially in areas of deprivation or where there is poor or unequal access, will contribute to reducing health inequalities locally. In neighbourhoods with more green spaces, it seems that disadvantaged groups experience the greatest improvements in health, and socioeconomic disparities in health are reduced. Improvements must be carefully planned, and purposeful consultation must occur at all stages to provide equitable, sustainable benefits and ensure health inequalities are not inadvertently exacerbated (57).

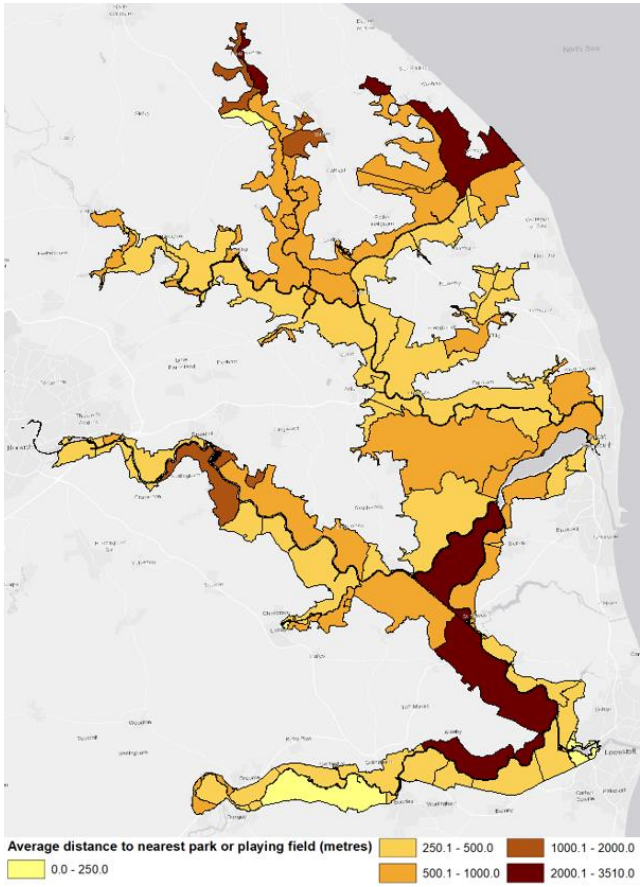

Figure 13: Map showing the average distance to the nearest park or playing fields for LSOAs associated with the Broads using ONS estimates – [ONS access to green space](#).

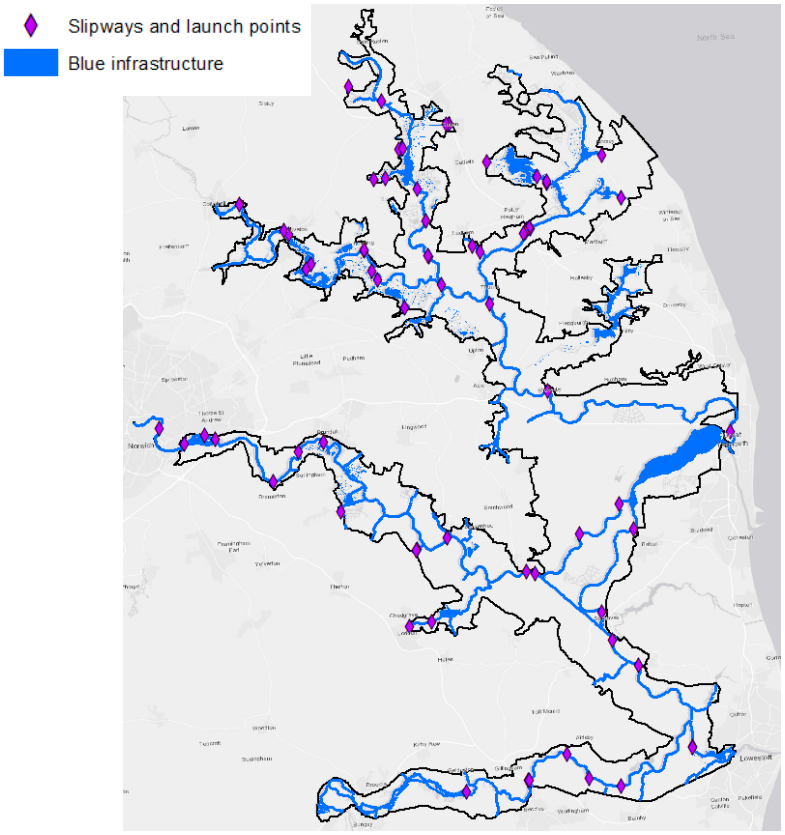

Figure 14: Map showing blue space, slipways and launch points within the Broads – [Slipways and launching points](#).

Housing Quality

Housing affects your health both directly and indirectly. Poor housing conditions such as overcrowding, damp, indoor pollutants and cold have all been shown to be associated with physical illnesses including eczema, hypothermia, and heart disease, as well as mental health illnesses such as increased anxiety, depression and stress. Respiratory health has been shown to be particularly affected in both adults and children. The cost to the NHS of poor housing conditions in England is estimated at £1.4 billion per year. Vulnerable people are more likely to be impacted because of their age, deprivation, illness, or disability (58).

In contrast to Norfolk, Suffolk, and England, the Broads have a greater percentage of residents who own their homes. Within the Broads, only 4.9% of homes are designated as socially rented, whereas in the comparison areas, the range is 15%-17%. Approximately 0.8% of homes in the Broads are overcrowded. This is significantly lower than Norfolk, 2.0%, Suffolk, 2.1%, and the national average, 4.3%. Overcrowded homes are not distributed evenly across the Broads. The most deprived areas have a significantly higher proportion of homes that are overcrowded. Across the Broads 2.9% of households do not have central heating compared to the England average, 1.5%. Figure 15 shows the type of fuel type used for central heating in the Broads and comparison areas. The Broads has more homes using oil, 32%, than any other fuel type and 28.2% of homes are connected to mains gas. In Norfolk, Suffolk and England mains gas is the main fuel type. Approximately 63% of homes across the area have energy ratings of D or below, indicating they have poor insulation and are costly to heat. In Felmingham, Worstead and Happisburgh, and Thurlton, Haddiscoe and Geldeston, this rises to above 80%. Figure 16 shows there is a positive correlation between households having a good energy rating and having mains gas for their central heating, therefore households not connected to mains gas are likely to be more inefficient.

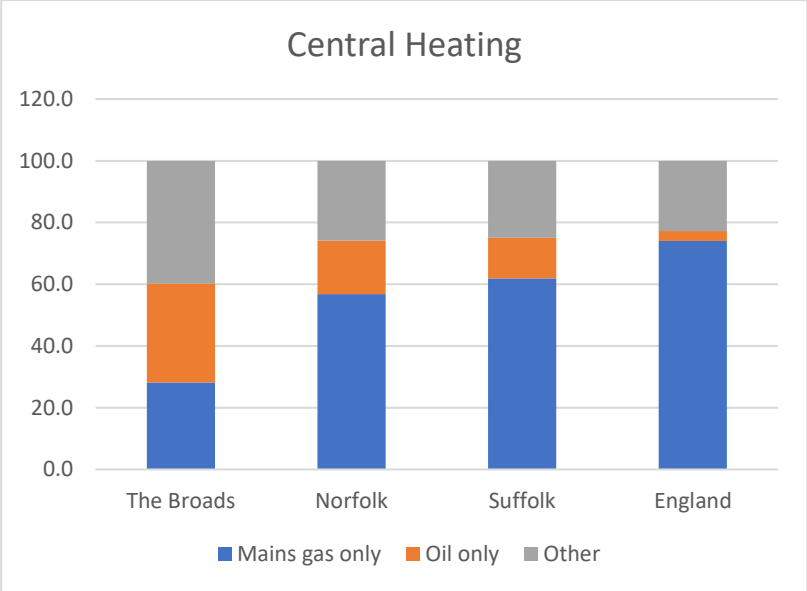

Figure 15: Different fuel types for households central heating in the Broads, Norfolk, Suffolk, and England – ONS census 2021.

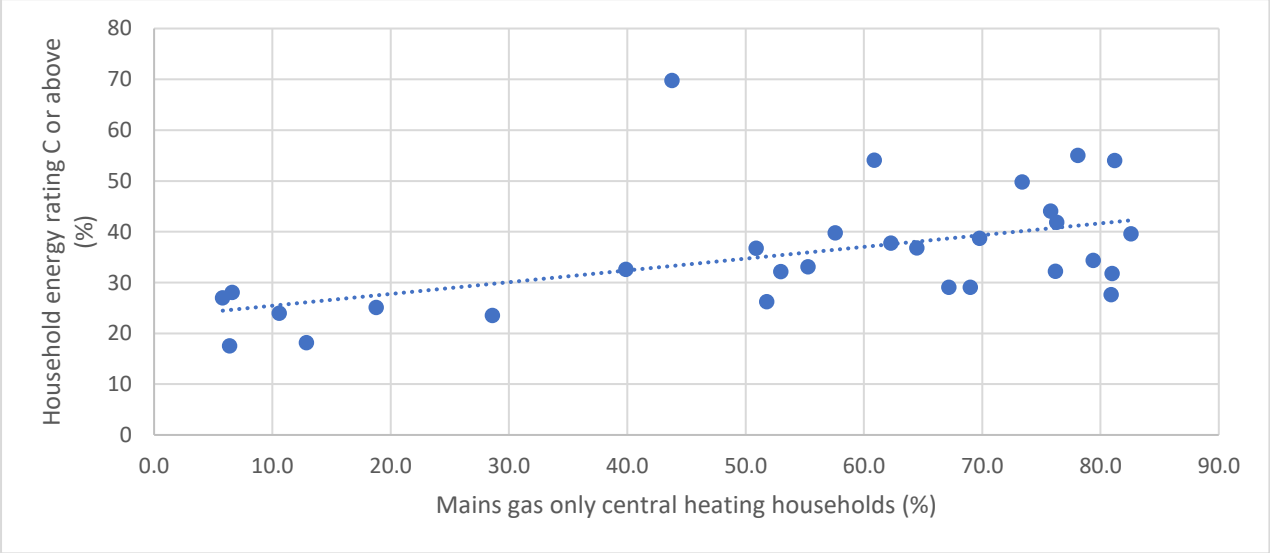

Figure 16: The Broads MSOAs comparing household energy efficiency and gas only central heating – ONS energy efficiency of housing.

The importance of the quality of housing came to the fore throughout the COVID-19 pandemic, which saw people forced to spend greater amount of time at home (59). Although housing standards and quality are largely governed by the national set building regulations, the Local Plan could indicate the need to incorporate energy efficiency more comprehensively into building design and ensure homes are properly ventilated and account for the impacts of hot and cold weather. While also providing adequate outdoor space, or where this is not possible, suitably sized child friendly balconies, and good quality affordable housing.

Mental Health

Most recent national data demonstrates that rates of diagnosis and referral for mental ill health are continuing to increase (60). In England the prevalence of depression in adults increased from 5.3% in 2012/13 to 12.7% in 2021/22. In 2022/23 GP QOF[2] prevalence identifies an average of 14.2% of patients that are associated with the Broads' GP practices have depression. Out of the 32 GP practices, 56% have a higher proportion of patients with depression than the England average and the trend is increasing. In 2022/23 Nelson Medical Centre, Great Yarmouth reported 18.4% of its patients were suffering with depression. Mental health illness, such as depression, is a known risk factor for self-harm. Across wards associated with the Broads, the median SAR value for emergency hospital admissions for intentional self-harm is 75.8. The Norfolk SAR value is 97.1 and the Suffolk value is 109.8. Within the Broads, Central and North ward has the highest SAR value of 180.5, with Wroxham, Stalham and Happisburgh also with a high number of admissions for intentional self-harm.

Loneliness and isolation can impact a person's mental health and wellbeing, leading to depression as well as other adverse health outcomes, including higher mortality rates. Residents living alone are more likely to suffer from social isolation. The 2021 ONS census reports that across the Broads area 34.2% of residents live by themselves, this is greater than Norfolk, 31%, Suffolk, 31.2%, and England, 30.1%. In 2016 age UK calculated the risk of loneliness amongst over 65s for small areas. Risk of loneliness is at its highest within the most deprived wards of the Broads; figure 17 highlights areas of Lowestoft, Great Yarmouth, Heckingham and Beccles as having the highest risk of loneliness.

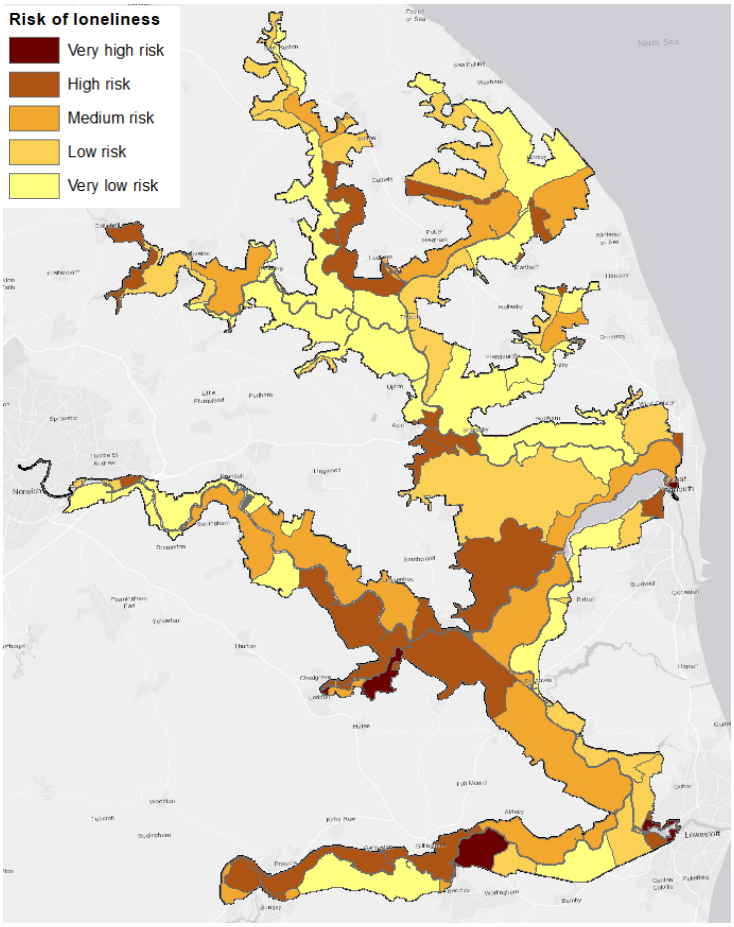

Figure 17: Risk of loneliness in LSOAs associated with the Broads - Age UK.

Mental health is a complex issue with many inter-related factors and causes. The environment people live in can influence their mental health and wellbeing. Planning can support the development of healthier living environments which enhance quality of life. Enabling residents' good access to services, natural environments and quality housing can start to address these issues. The creation of neighbourhoods which enable residents to have good access to services and provide opportunities for social interaction can promote a feeling of community and benefit the mental health of residents (61).

[2] Quality and Outcomes Framework (QOF) prevalence rate is the total number of patients on the register, expressed as a proportion or percentage of the total number of patients registered with the practice at one point in time.

Obesity

Excess weight is recognised as a major determinant of premature mortality and avoidable ill health. Obesity increases the risk of developing a whole host of diseases with an annual cost to the NHS of over £6 billion. Obese people are at increased risk of certain cancers, for example they are 3 times more likely to develop colon cancer. Obese people are 2.5 times more likely to develop high blood pressure and 5 times more likely to develop type 2 diabetes (62).

Within wards associated with the Broads, 21.6% of children starting primary school are overweight or obese; this is similar to Norfolk, Suffolk, and England. By year 6 this has increased to 32.3% in the Broads; this is less than the comparison areas that have values of approximately 36-37%. The greatest proportion of overweight or obese children are located in Great Yarmouth, Lowestoft, and Wroxham. Both Blofield and South Walsham and Coltishall wards are in the highest 20% of English wards with overweight adults. In 2022/23 GP QOF data suggests there is an average obesity prevalence of 13.9% in GP practices associated with the Broads, with Nelson Medical Centre, Great Yarmouth and Victoria Road Surgery, Lowestoft recording the highest prevalence, approximately 20%. The average prevalence of patients with obesity in GP practices in Norfolk and Waveney is 13.1% and in England, 11.8%.

There is a growing body of evidence on the association between exposure to fast food outlets and obesity (63). However, despite fast food access and prevalence of childhood obesity being concentrated around urban areas, there is no statistical relationship between access to fast food outlets and year 6 obesity at a Norfolk level. The relationship between obesity is much more closely linked with deprivation, shown in figure 18, than specifically to access to fast food outlets, providing evidence that obesity is a complex health outcome and linked to several factors (63). A person is twice as likely to experience obesity in the most deprived areas compared to the least deprived areas of England. Delivery services, such as Deliveroo and JustEat, have become increasingly popular over the last decade, and their popularity accelerated further during the COVID-19 pandemic. This has increased the numbers of people able to easily access alternative food options, including fast food. JustEat alone has a coverage of approximately 90% of the UK's population (64), and therefore either JustEat or other delivery services are likely to cover large areas of the Broads.

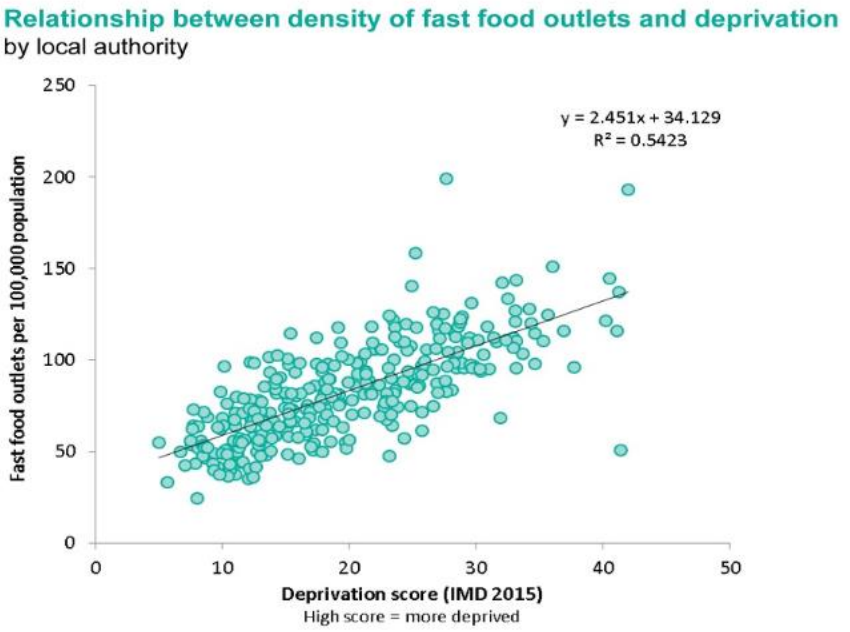

Figure 18: The relationship between fast food outlets and deprivation across England – UKHSA obesity and the environment.

Planning can influence the built environment to improve health and reduce obesity and excess weight within the Broads. The Local Plan can ensure Health Impact Assessments are required to be undertake for fast food planning applications and developments avoid over-concentration in existing high streets and restricting numbers where there is close proximity to schools or other facilities for children and young people. Development should also provide opportunities for communities to access a wide range of healthier food production and consumption choices. This includes increasing active travel or public transport access to shops and markets that sell a diverse option of healthy food. Tackling obesity should also include social initiatives to reduce health inequalities, such as healthy free school meals. Physical activity is also an important driver of tackling obesity, therefore, access to environments that encourage physical activity such as green spaces, active travel routes and natural environments are essential to be considered in planning decisions (65). Local Plan policies can seek to limit the development of hot food takeaways where evidence suggests this is appropriate, for example in areas with a high prevalence of obesity and deprivation (66).

Physical Activity

Increasing physical activity has the potential to improve physical and mental health and the wellbeing of individuals, families, and communities. Adults in England should aim to take part in at least 150 minutes of moderate intensity physical activity each week. Regular physical activity can help to prevent and manage over 20 chronic conditions and diseases. Conversely physical inactivity is linked to a range of health conditions, including diabetes and some cancers and it is estimated to be responsible for a significant proportion of premature all-cause mortality (67).

Estimates from Active Norfolk indicate that rates of physical inactivity in adults across the Broads are approximately 22.5%; compared to 21.6% in Norfolk, 20.2% in Suffolk, and 22.3% in England. Figure 19 shows an estimate of physical inactivity across the Broads; MSOAs associated with Great Yarmouth are highlighted as having the highest levels of physical inactivity. For most people, the easiest most acceptable forms of physical activity are those which can be incorporated into everyday life, such as walking and cycling (67). A potential way planning can influence physical activity is through ensuring developments promote active travel by creating walkable environments and safe routes for cycling. Investments in cycling infrastructure and public transport can also encourage active travel. Improving or adding green spaces improves air quality, reducing adverse health impacts, as well as encouraging physical activity, making spaces feel more welcoming and creating opportunities for other engagement types with the environment (55).

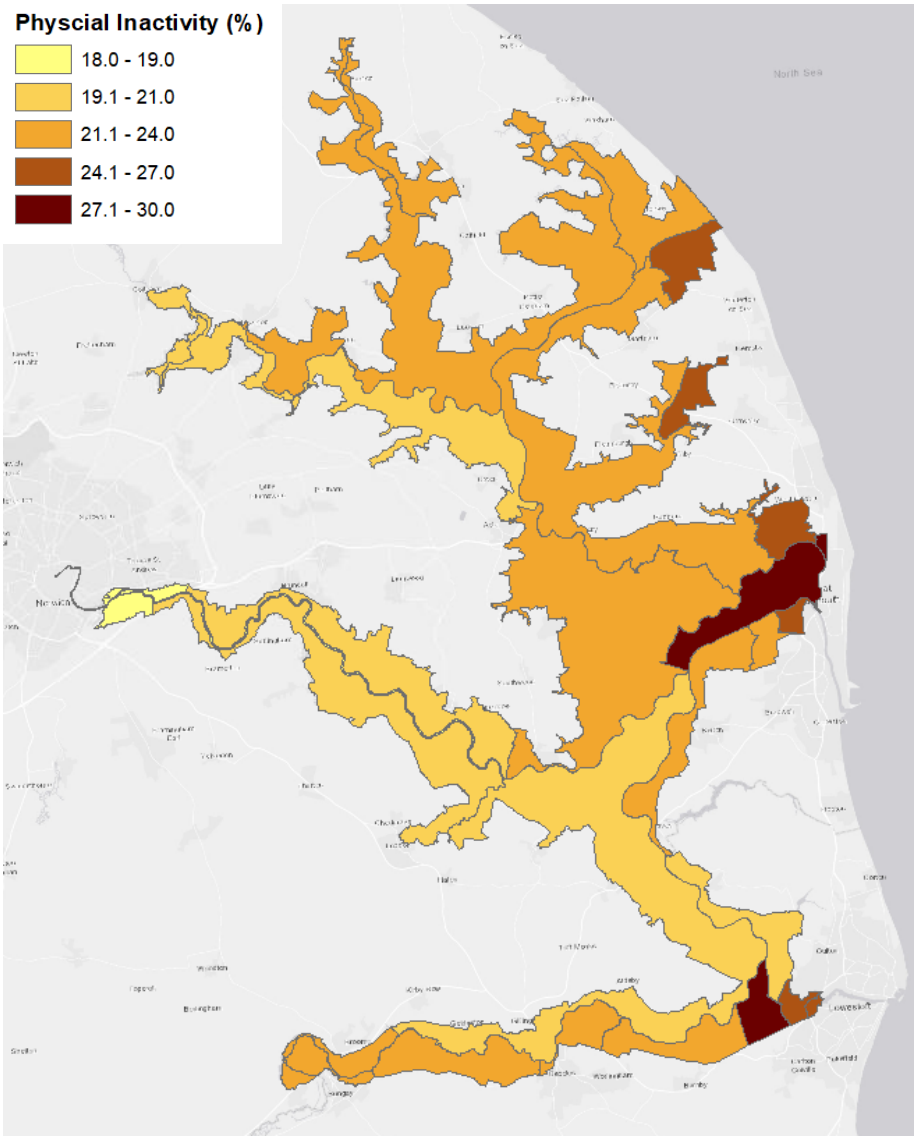

Figure 19: Estimates of adult physical inactivity levels across MSOAs associated with the Broads – Active Norfolk.

Smoking

Smoking is uniquely harmful, causing damage not only to smokers themselves but also to the people around them. Smoking is one of the main causes of health inequalities in England, with the harm concentrated in disadvantaged communities and groups. Smoking is a major risk factor for many diseases, such as lung cancer, chronic obstructive pulmonary disease, heart disease and is the leading cause of premature death in England (68). In 2014 an average of 7.75% of the Broads residents aged 15+ were regularly smoking, which is significantly less than Norfolk, Suffolk, and England. Both Norfolk, 15.3%, and Suffolk, 14.0%, have a significantly higher proportion of women smoking in early pregnancy compared to England, 12.8%. Smoking throughout pregnancy has significant health risks for the baby, including pregnancy complications, low birth weights and increased risk of asthma for the child (68). Although the Local Plan is unable to directly impact smoking prevalence in the area, links could be made with the quality of green space by encouraging no smoking policies in areas, such as parks and commons or encouraging businesses to adopt no smoking within their sites (69).

Conclusion

The technical health and wellbeing paper provides a valuable standalone evidence base that can be used to inform the Local Plan making process. By analysing the data, policymakers and healthcare professionals can gain insight into the health status, needs and disparities within the Broads. The data can help to guide allocation of resources, policies and interventions that address the specific health issues unique to the local population. Monitoring and evaluation of local health indicators can provide feedback on the effectiveness of the Local Plan policies, helping to identify areas for improvement and adjust strategies as needed. The use of local health data is crucial to developing evidenced-based solutions that improve the health and wellbeing of the Broads.

Key Messages

Specific Issues	Possible policy recommendation	Example Local Plan policy
Access to health care	Require new developments to play a role in enhancing public transport services by fostering accessibility and interchanges. Whenever feasible, co-locate primary health care facilities with other public amenities to create a centralised hub of public services for local communities, encouraging interconnected journeys.	Salford Local Plan. Chapter 15: Health
Active travel	Enhance the pedestrian and cycling environment in new developments, optimising routes to connect with transport and social infrastructure, as well as green spaces. Implement measures that improve road safety and include the provision of secure bicycle parking.	Newham Local Plan. INF2 Sustainable Transport
Air quality	Place sensitive developments such as residential areas and schools away from regions with poor air quality and design the site layout to minimise their impact. Reduce reliance on cars by strategically locating developments near services, promoting alternative transportation options, and providing facilities such as electric vehicle (EV) charging points.	Oxford City Local Plan. Policy RE6: Air quality
Flood risk	Prevent unsuitable development in high-risk flood areas and ensure that new developments do not amplify flood risks in other locations. Construct households with flood resilience, and utilise green infrastructure assets, such as Sustainable Drainage Systems (SuDS), to mitigate the risk of flooding.	Norwich City Local Plan. DM5 Planning effectively for flood resilience
Internet connectivity	Include in new developments a baseline requirement for broadband connectivity that supports multiple digital infrastructure providers. Fibre-to-the-premises (FTTP) involves the installation of fibre optic cables directly from the local exchange to individual premises, ensuring quicker and more dependable broadband services.	Salford Local Plan. Chapter 17: Digital Infrastructure
Ageing population	Designate appropriately situated sites near services and amenities, ensuring that housing is adaptable to accommodate diverse needs throughout a person's lifetime, acknowledging the significance of specialised accommodation. Foster an age-friendly environment by making housing, transportation, and other elements accessible and supportive for the elderly, allowing them to live independently.	The Highland Council Local Plan. Policy 37: Accommodation for an Ageing Population.
Energy inefficient housing	Ensure that new developments meet energy efficiency targets in compliance with Building Regulations. In cases where a home undergoes extension or partial conversion, consider implementing energy efficiency enhancements not only to the extension but also to the existing building (consequential improvements).	Net Zero New Buildings. Policy evidence for North Somerset Local Plan
Social isolation	Identify areas for development that offer convenient access to services and amenities, situated in proximity to pedestrian and cycling infrastructure. Ensure these locations provide opportunities for recreational activities, promote well-being, and offer communal spaces for social interactions. Design walking paths that are inclusive, catering to the needs of parents and individuals with varying levels of mobility, and extending into green areas.	Southwark Local Plan. P45 Healthy developments and P51 Walking.
Physical inactivity	Plan new developments with Active Design principles, incorporating physical activity into both the existing and new environment. This involves the provision of suitable green spaces and opportunities for active travel.	Solihull Local Plan. Policy P18: Health and Well Being

Data Sources

Access to Health Assets & Hazards

Active Norfolk Insight

Age UK – Risk of Loneliness

Broads Authority

Energy efficiency of housing in England and Wales: 2022

English indices of deprivation 2019

Fast food outlets: density by local authority in England

Fingertips

Journey Time Statistics

Key Stage 2 education data

GCSE education data

National Atmospheric Emissions Inventory

NCC Health Inequalities Dashboard

NHS Digital

Norfolk Insight

Norfolk Public Health Annual Report

Ofcom Connected Nations

OHID – Local Health

ONS Census 2021

ONS Health Index

School travel time data

Shape Atlas

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