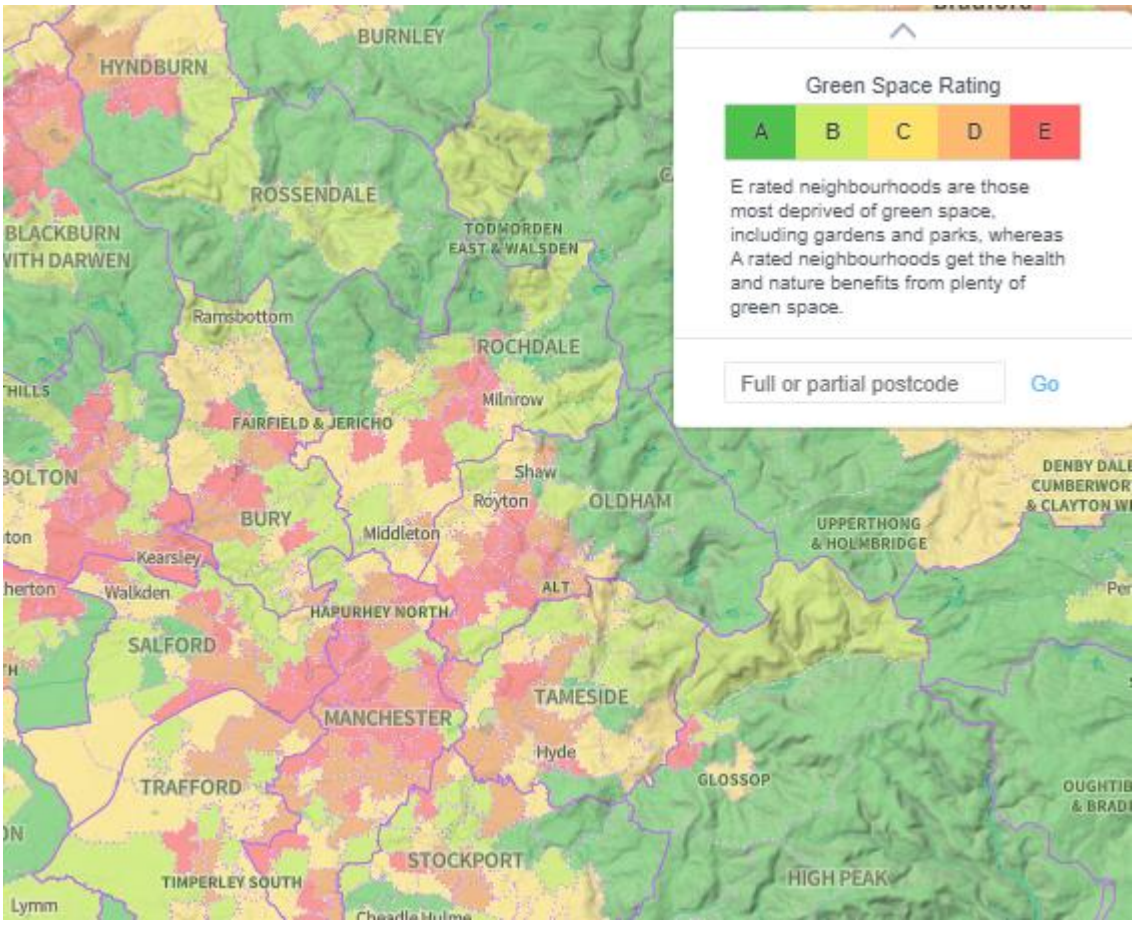
Friends of the Earth

England's green space gap

How to end green space deprivation in England

September 2020



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Updated October 2020 - An update to the earlier analysis was carried out in October to include small areas of green space (less than 2 hectares) previously excluded. One category of neighbourhoods was also moved from Rating E to Rating D. The resulting changes are overall not significant and the implications of the analysis remain the same – millions of people live is neighbourhoods deprived of green space, BAME people are more than twice as likely to live in one of these neighbourhoods than white people, and almost 40% of BAME people live in areas rated E. We continue to listen for ideas on how to further strengthen our analysis.

Citation: England's green space gap - How to end green space deprivation in England, 2020, Friends of the Earth

Summary report: https://policy.friendsoftheearth.uk/insight/englands-green-space-gap
Map: https://friendsoftheearth.uk/nature/access-green-space-england-what-does-picture-look-your-area
Data set: https://friendsoftheearth.uk/nature/access-green-space-england-are-you-missing-out

Executive Summary

Friends of the Earth has used official data to map the availability of green space for people living in neighbourhoods across England for the first time.

We have combined official data on public green space, garden space, and open access land such as mountain, moor, heath, down or common land, with data on neighbourhood populations, ethnicity and income.

Analysis of the data reveals a marked disparity in green space availability, a strong correlation between green space deprivation and ethnicity, and a correlation between green space deprivation and income.

England's green space gap shows:

- About 1 in 5 of the population of England lose out on the benefits of quality local green space.
- Almost 10 million people in England live in 1,108 neighborhoods which are the most deprived of green space.
- 955 neighbourhoods have slightly better but still very poor green space provision.

Our findings, which corroborate previous analysis by others of a strong correlation between green space deprivation and ethnicity, find that:

- Almost 40% of people of Black, Asian and Minority Ethnic backgrounds (BAME) live in England's most green space-deprived neighbourhoods.
- People of BAME background are more than twice as likely as a white person to live within England's most green space–deprived neighbourhoods.

Unique multiple benefits of green space

England's green space gap complements the growing stable of studies on green space provision and the growing wealth of evidence on the substantial health benefits of quality green (and blue) spaces, parks, corridors and neighbourhoods.

The multi-functional benefits of green and blue space and contact with nature are already enjoyed by many people who tend not think twice about enjoying and gaining from their routine visits, whether for health, fitness, recreation, leisure and learning or, simply to get a brief break from the bricks, concrete, tarmac and daily rush of modern life.

Because the benefits are not limited to health this report also sets out how quality green spaces should be an essential tool for government to deploy in its work in other related areas including from urban cooling and flood prevention to carbon storage and the restoration of the nation's dwindling nature.

Recognition that having quality green and blue spaces and nature nearby provide us with important, unique and irreplaceable multiple benefits has been growing for some time, although the use of that evidence and knowledge has yet to result in the concerted and sustained levels of investment required for the benefits are to accrue to everyone, and to all areas of England.

Funding green spaces to level up

By highlighting where particular investment in green space can be directed the data is consistent with action to 'level up' proper provision of the kind of amenity which any self-respecting community should be able to expect as the norm.

Sustained funding, not one-off cash deposits, is needed to avoid good investments turning bad. Effective investment means plugging inadequate provision and then sustaining quality so that the benefits green spaces provide continue to accrue and play a full and unique multi-functional role in support of a multiple government aims.

Avoiding investment blips and drips is imperative to reverse decades of decline, to sustain the benefits, and to avoid the factors which lead to deterioration of green spaces and can signal wider social and community decline.

In this report, we have presented case studies, from city-wide planning to local initiatives, which showcase where green spaces have been successfully protected, managed, and created for the benefit of people and nature alike, along with some campaigns to save threatened spaces (Section 7). We also propose policy solutions and recommend ways forward (Section 8).

Recommendations

The clear consensus is that people need quality local parks and green spaces and more routine contact with nature. Central and local government, professions and communities can all now be part of reversing the decline of nature and green spaces and making 'nearby nature' and space for health and well-being a reality.

The knowledge and the means exist to weave sustained support for green spaces into existing strategies to boost public health, learning, skills and formal education alongside action to reduce climate changing emissions, and to restore England's deteriorating wildlife and natural habitats and people's lack of contact with nature.

Lasting commitment is imperative including through quality land use planning and proper funding over the long term, alongside novel forms of finance to provide the skilled services that are needed to properly plan, use and care for parks and green spaces to maximise their role and to prevent their decline. Recognising the national consensus over the undoubted value and importance of access to quality parks and green and blue spaces, we recommend that the government should:

1. Protect existing space forever
2. Create new green spaces
3. Improve the land use planning system so that it delivers for green space and nature
4. Invest in green spaces to level up the benefits
5. Fully factor in cost savings and benefits to policies and decisions
6. Ensure both quality and quantity of provision
7. Explore new forms of funding
8. Make parks and green space a statutory service
9. Ensure green space is developed with and for people of all cultures
10. Make green spaces hubs for learning and skills

Positive signs

The value of and the need for more quality green spaces existed before 2020 but has been reinforced by public reaction to the Covid-19 pandemic and lockdown, where both the role and the lack of quality green space has come to the fore.

There are signs that some parts of government do understand the role of green spaces perhaps more now than ever. The government cites the health benefits of green space and contact with nature in its 25 Year Environment Plan[1]:

> "Spending time in the natural environment – as a resident or a visitor – improves our mental health and feelings of wellbeing. It can reduce stress, fatigue, anxiety and depression. It can help boost immune systems, encourage physical activity and may reduce the risk of chronic diseases such as asthma. It can combat loneliness and bind communities together.
>
> "In the most deprived areas of England, people tend to have the poorest health and significantly less green space than wealthier areas.
>
> "Our aim is for more people, from all backgrounds, to engage with and spend time in green and blue spaces in their everyday lives."

In response to C-19, the government declaration that "people need parks" (see Section 2) and its 'levelling up' and *Build Back Greener and Better* promises speak to ensuring that everyone in England has access to quality green spaces.

That should also see the start of better governance, wiser investment, and the kind of sustained action to address inequalities which were identified both in the 2010 Marmot Review of health inequalities in England and the recent follow up which noted little change in health inequalities in the intervening decade.

Investment in accessible quality green space, especially in areas that have been overlooked or neglected, would certainly be a sound investment in people's physical and mental health and in their nation's natural and semi-natural assets.

Rising recognition of the health benefits of green spaces has led to the government giving £5 million to the National Academy for Social Prescribing, part of which will be for improved use of green spaces such as community gardens[2].

The ongoing challenge, because it is not about one-off spending sprees, is also not down to one government department but rests across most Whitehall departments and their agencies. Boosting access to quality green space should be part of the green bounce which can help the nation and its finances recover from the pandemic and be better prepared and more resilient in the future.

As Prime Minister Boris Johnson MP said when he was serving as Mayor of London:

> "The thing that we should be doing is improving and upgrading our green space by investing in parks, in planting trees and in generally improving the amenities and quality of life (of Londoners)."[3]

Section 1: Why Green Space matters

England's green space gap reveals marked disparities in public access to green space across England which mean that access to proven ways to support and boost people's health, in ways that also save the nation vast sums in avoided health costs and wider social and environmental benefits, is effectively being denied to a large proportion of the population in England.

The findings complement a growing body of evidence on, and a growing national consensus about, the role, importance and benefits of green space access for people's health, as well as the risks of allowing green spaces to be lost or eroded such as through lack of proper funding, neglect, and planning and development threats.

Many other recent studies have also examined the multiple benefits of local green space and routine contact with nature and the great outdoors for:

- Physical and mental health
- Reduced stress and improved well being
- Healthy childhood development
- Educational attainment
- Reduced health-related costs to society
- Better neighbourhoods and social cohesion.

The role and value of quality green spaces is also increasingly studied and understood for contributing to increased resilience to environmental pressures, including those linked to a changing climate and declining nature, such as:

- Reduced noise pollution
- Helping to reduce flood risk
- Moderating temperatures and harm from heatwaves
- Absorbing and storing carbon
- A partial role in mitigating air pollution
- Supporting and boosting wild animal and plant species
- Maintaining and restoring healthy functioning natural ecosystems.

Ways to make the most of these multiple benefits have been summarised in recent guidance to government, communities, and others with a stake in health, equalities, placemaking, resilience, and other aims[4].

Numerous renowned organisations, think tanks and research and funding bodies have also called for proper investment and provision of parks and green spaces not least the Open Spaces Society (OSS), which has called on the government to:

- Introduce a national plan for open spaces, with a national standard for the amount of green space and ring-fenced funding which will secure good-quality spaces close to people's homes.
- Place a duty on local authorities to ensure that everyone can enjoy good-quality, well-maintained and safe open space within 300 metres of their homes[5].

Government and green spaces

Recognition of the value and paucity of quality green spaces and parks existed before 2020's Covid-19 pandemic lockdown not least in the government's 25 Year Environment Plan launched in 2018 (see Executive Summary).

The Rt Hon. Rishi Sunak MP, Chancellor of the Exchequer, speaking in 2018 as the then Minister for Parks and Green Spaces in response to Fields in Trust's *Revaluing Parks and Green Spaces* work, said:

> "Our parks are precious, and I want to improve access to them for everyone - including the young, isolated and the vulnerable."[6]

Just before the lockdown, the Health Secretary, Rt Hon Matt Hancock MP spoke about the kind inequalities this report highlights:

> "Tackling this postcode inequality matters to this government. It's what we mean when we talk about 'levelling up'. The underlying factors are a complex interaction between demography and economy. But because healthcare inequalities are geographically concentrated, it means we can take a targeted approach."[7]

During the lockdown, the Communities Secretary, Rt Hon Robert Jenrick MP declared:

> "While the virus does not discriminate, we know that the lockdown is much harder for people who don't have a lot of living space, a garden, or anywhere for their children to run around. People need parks."[8]

Mr Jenrick's Housing, Communities and Local Government ministry's own planning policies also recognise the importance of green space (see Appendix 4).

The government's *People and Nature Survey* showed that during July 2020, almost half of England's population (46%) spent more time outside than before the virus (up from 44% in June and 26% in May 2020). 42% of adults reported that 'nature and wildlife is more important than ever to my wellbeing' and 35% said they were visiting local green and natural spaces more often.[9]

YouGov's July 2020 poll showed that most people favoured visits to parks and gardens over other ways to spend their time: "When asked how they felt about returning to certain attractions, most Brits (80%) say they feel comfortable returning to outdoor attractions such as parks and gardens – and over a third (37%) would feel very comfortable doing so."[10]

A lockdown survey by letting agents Benham and Reeves identified changing priorities for people looking to rent in London[11]. The survey found more people wanting outdoor space and local facilities and shows prospective renters' shifting priorities compared with their priorities before the pandemic. The most sought-after features, with their previous ranking in brackets, are:

1. Fast broadband (previously 2nd)
2. Outside space (7th)
3. Close to a park or green space (9th)
4. Concierge onsite (3rd)
5. Good transport links within less than 10 mins walk (1st)
6. Food shop on site (4th)

The government's own research also identifies clear inequalities in people's opportunities to access and engage with nature, green spaces and the great outdoors: annual monitoring of people's engagement with the natural environment by the government's nature watchdog, Natural England, shows that children from the most deprived areas are 20% less likely to spend time outside than those in affluent areas[12].

The survey also shows that 70% of children from white backgrounds spend time outside once a week compared with 56% of children from Black, Asian and Ethnic Minority (BAME) backgrounds. When asked how accessible they found local green space, 33% of white respondents strongly agreed that they found it accessible compared with 19% of BAME respondents who agreed about the ease of access. Neither figure is especially high.

Recognising the multi-purpose role played by green spaces, parks and nature areas, Natural England has stated that "everyone should have access to good quality natural greenspace near to where they live, i.e. 'Nature Nearby'[13]:

> "Nature nearby is good for people, good for wildlife and good for the environment", that quality open space is good for us, that access to natural green spaces for fresh air, exercise and quiet contemplation has benefits for both physical and mental health and that research provides good evidence of reductions in levels of heart disease, obesity and depression where people live close to green spaces."[14]

Green space, ethnicity and Covid-19

Soon after Robert Jenrick's positive "People need parks" statement, Fields in Trust updated its *Green Spaces Index*[15] and reported that:

- 2.69 million people in Britain do not live within 10 minutes' walk of green space.
- The degree of access to green space will reduce with rising population and with development pressures on green space.
- Britain has an average 32.94 square meters of green space per person, but there are large regional differences with people in the east Midlands, London, north east and north west of England having deficit access.

Another lockdown study by the Centre for Cities[16] assessed 62 urban areas across England and Wales and found varying amounts of 'exercisable space' for people to use during the limitations on movement outdoors:

- Milton Keynes came top for the access people living there have to green space with 47.0 square metres (sqm) of public parks and gardens per person.
- Northampton = 9.8 sqm of green space per person (nearly 18 per cent live in flats and are less likely to have access to garden space).
- Liverpool = 16.9 sqm per person.
- London = 15.1 sqm per person.
- Southend-On-Sea = 14.3 sqm per person (24% of people live in flats).
- Worthing = 3.4 sqm per person.

Andrew Carter of Centre for Cities, said:

> "As we all learn to live with the lockdown, having enough inside and outside space is a real help for some people. But where housing is the least affordable, people are less likely to have

> access to their own space – either in a flat or house or in the garden. That's something we know councils will be considering when they weigh up calls to close off green spaces."

Access to green space during lockdown and especially disparities in access by ethnicity has also been highlighted by the Office for National Statistics (ONS) whose analysis of data from Natural England and Ordnance Survey shows that one in eight households (12%) in Great Britain lacks access to garden space, whether private or shared.

In England, the ONS also report that people of black ethnicity are:

- nearly four times as likely as white people to lack access to outdoor space at home such as a garden (private or shared), patio or balcony (37% compared with 10%).
- 2.4 times less likely than those of white ethnicity to have a private garden, even when comparing people of similar age, social grade and living situation such as location and living with or without children 17.

The virus and lockdown have underlined such inequalities which compound susceptibility to the virus as The King's Fund, the independent health organisation, has identified:

> "The virus has taken a disproportional toll on groups already facing the poorest health outcomes. In particular, it has underlined the structural disadvantage experienced by people from black, Asian and minority ethnic communities who have been at much greater risk of contracting and dying from Covid-19. The economic and social consequences of measures to contain the virus risk worsening these inequalities further.
>
> "It is time for a reset in public policy to improve the population's health and tackle deeply entrenched inequalities. This includes responding to the direct impact of Covid-19 and redoubling efforts to reduce health inequalities more broadly, including by addressing socio-economic drivers of health such as housing, education, employment and access to affordable healthy food. This will be a true test of how serious the government is around its 'levelling up' agenda.
>
> "Sustained and coherent action is needed on the prevention and management of inequalities in health at all levels, including through local place-based partnerships spanning the NHS, local government, voluntary sector organisations and communities themselves."[18]

Most recently, in September 2020, when launching the government's *State of the Environment: Health, People and the Environment* report[19] Environment Agency Chief Executive, Sir James Bevan referenced both the health costs and savings and the ethnic disparities in green space access:

> "investing in a healthy environment is about the smartest thing we can do. It makes medical sense, because it will mean better health for all and less strain on the NHS. It makes economic sense, because it will save the NHS billions of pounds: the NHS could save an estimated £2.1bn every year in treatment costs if everyone in England had access to good quality green space. And it makes social sense, because those who live in poor environments are also those who have the worst health and the lowest incomes: levelling up the environment will also help level up everything else.
>
> "There is also racial inequality in terms of access to nature and the health benefits that brings: one study found that city communities with 40% or more black, Asian or ethnic

minority residents have access to 11 times fewer green spaces locally than those comprising mainly white residents."[20]

Better health for all

In July 2020, Public Health England (PHE) reviewed evidence of the health and wider social benefits of green space and reported that:

> "Evidence shows that living in a greener environment can promote and protect good health, and aid in recovery from illness and help with managing poor health. People who have greater exposure to greenspace have a range of more favourable physiological outcomes. Greener environments are also associated with better mental health and wellbeing outcomes including reduced levels of depression, anxiety, and fatigue, and enhanced quality of life for both children and adults. Greenspace can help to bind communities together, reduce loneliness, and mitigate the negative effects of air pollution, excessive noise, heat and flooding. Disadvantaged groups appear to gain a larger health benefit and have reduced socioeconomic-related inequalities in health when living in greener communities, so greenspace and a greener urban environment can also be used as an important tool in the drive to build a fairer society."[21]

PHE also referred to evidence of the role of green space in helping to address poor and changing environmental conditions and pressures such as excess heat in cities:

> "UK climate projections predict that heatwaves are likely to become more intense and more frequent in the future (106). Heat-related deaths are expected to rise by 257% by 2050, in the absence of any adaptation (126). Older age groups are more susceptible to the effects of heat, and there are indications that more deprived populations may often be disproportionately affected (101, 127-129). There is strong evidence that in an urban context greenspace is associated with heat reduction (49). Research indicates there is a 'park cool island' effect of between 1.5-3.5°C, with a stronger cooling effect for larger urban greenspace, and that shadegiving street trees also provide an important means of heat relief (103). Access to these 'cool islands' can help to offset the detrimental health effects of extreme heat. Greenspace also increase the cooling effect derived from water and wind sources (104). Other elements of green infrastructure such as roof gardens have demonstrated a reduction in the UHI effect (104, 105)."

Those lockdown studies build on a decade or more of evidence which link access to quality green space to tangible public health and other societal benefits. The government's recent focus on obesity and health is helpful but knowing the importance of fitness and exercise for good physical and mental health should not come as a surprise given the steady flow of studies and reviews of evidence which successive recent governments will have known about and have also commissioned.

The government asked Professor Sir Michael Marmot to look at health inequalities in England. In 2010, the landmark *Review of Health Inequalities in England post 2010,* known as the Marmot Review, presented its report, *Fair Society, Healthy Lives*[22] and referenced a host of studies on the beneficial health effects of green space including:

- "Creating a physical environment in which people can live healthier lives with a greater sense of well-being is a hugely significant factor in reducing health inequalities. Living close to areas of green space – parks, woodland and other open spaces – can improve health, regardless of social class."[23]

- Numerous studies point to the direct benefits of green space to both physical and mental health and wellbeing[24].
- Green spaces have been associated with a decrease in health complaints[25] blood pressure and cholesterol, improved mental health and reduced stress levels,[26] perceived better general health,[27] and the ability to face problems[28].
- The presence of green space also has indirect benefits: it encourages social contact and integration, provides space for physical activity and play, improves air quality and reduces urban heat island effects[29].
- People who are most at risk of poor health are more likely to live in the most deprived environments, which can have a cumulative negative influence on stress levels, self-esteem, weight and physical activity[30].

Professor Marmot also referred to the importance of people having a role in shaping the communities and places which influence physical and mental health and wellbeing and described how inequalities among communities relate to inequalities in health.

Topically, Marmot suggested that the budget at the time for roadbuilding could instead be used to create 1,000 new parks across England. The roads budget has grown substantially since 2010 and the 2020 Budget has committing £27.4 billion to road building by 2025.

Meanwhile, spending on parks and green space remains stuck in reverse gear and certainly not reflecting the unique cost benefits they provide (also see Section 2).

Notably, the recent 10 year follow up to the Marmot Review has found that: "Since 2010 life expectancy in England has stalled; this has not happened since at least 1900", and recommended that "Funding should be allocated in a proportionate way – those areas that have lost the most and are more deprived must receive renewed investment first - and at higher levels."[31] [32]

In the same year that Marmot reported, work by the Design Council and the Commission for Architecture and the Built Environment (CABE) identified the relationship between green space deprivation and ethnicity[33]. In-depth research in six deprived and ethnically diverse areas studies how residents viewed the importance of green space within their areas, how the green space is used, and the conditions needed to improve use.

A year later, in 2011, the UK's four Chief Medical Officers (CMOs) asserted the importance of, and issued guidance for, different kinds of physical activity for people of all ages from early years to older adults, ranging from gentle strolls and household tasks to more strenuous activity:

> "Regular physical activity can reduce the risk of many chronic conditions including coronary heart disease, stroke, type 2 diabetes, cancer, obesity, mental health problems and musculoskeletal conditions. Even relatively small increases in physical activity are associated with some protection against chronic diseases and an improved quality of life...
>
> "In addition, the report highlights the risks of sedentary behaviour for all age groups. Emerging evidence shows an association between sedentary behaviour and overweight and obesity, with some research also suggesting that sedentary behaviour is independently associated with all-cause mortality, type 2 diabetes, some types of cancer and metabolic dysfunction."[34]

The CMO's also highlighted estimated economic costs of inactivity at that time:

> "The estimated direct cost of physical inactivity to the NHS across the UK is £1.06 billion. This is based upon five conditions specifically linked to inactivity, namely coronary heart disease, stroke, diabetes, colorectal cancer and breast cancer. This figure represents a conservative estimate, since it excludes the costs of other diseases and health problems, such as osteoporosis and falls, which affect many older people."

Addressing inequality of provision and access, for example in relation to children (pages 28-29), the CMOs said:

> "In some areas, the environment may not be conducive to being physically active. However, there is also a population trend towards spending more time inside, where technology and in-house entertainment systems can increase screen watching and sedentary behaviours. Subsequently, less time is spent in active pursuits.
>
> "Finally, encouraging childhood physical activity is especially important for children from disadvantaged or vulnerable groups or where family or peer support for being active is limited."

On access more generally, the CMO's state (page 47) that:

> "These guidelines apply across the population, irrespective of gender, race or socio-economic status. However, barriers related to safety, culture and access, for example, can have a disproportionate effect upon the ability of individuals to respond to the guidelines; therefore, interventions to promote physical activity must consider this. Fear of traffic or strangers can often dissuade parents from allowing children to walk to school or play outdoors. Similarly, perceptions of violence in the community can restrict people's movement outside their house or car. These guidelines seek to support a more balanced assessment of risk compared with the important health benefits of physical activity."

The CMOs conclude (page 49) with a call for proper protection of parks and green spaces:

> "We also face significant challenges in the urban environment. As there is increasing pressure on open space, it becomes more important to protect parks and green spaces, and ensure that the environment encourages walking and cycling – especially for short urban journeys."

The National Children's Bureau reported in *Great Expectations* that:

- Children living in deprived areas are nine times less likely than those living in affluent areas to have access to green space and places to play.
- Boys living in deprived areas are three times more likely to be obese than boys growing up in affluent areas, while girls are twice as likely[35].

An earlier NCB briefing on how children's and young people's health is affected by green space access[36], cites earlier governmental policies on public health and attempts to address obesity:

> "The Public Health White Paper, 'Healthy Lives, Healthy People'[37] frequently refers to access to green space as an influencer of the health and wellbeing of communities (see esp. paras. 3.34-3.37). It links this to additional measures to promote active sport.
>
> "The Call to Action on Obesity[38] suggests local authorities should use opportunities to ensure the widest possible access to opportunities to be physically active through the use of parks and other outdoor spaces, as well as drawing upon sport and leisure services.

> "An indicator of utilization of green space for exercise/health reasons is included in the Public Health Outcomes Framework. Although the current measure for this only records this for those aged over 16, the Children and Young People's Health Outcomes Forum has recommended that, along with other indicators, this is adapted to record to include children and young people."

Evidence of the benefits of green space for exercise and physical health has therefore been in abundance for some time. Studies also have also started examining the role of urban green spaces in boosting people's mental health, and even being a form of protection for those at risk of mental illness[39]. A 2013 study found that:

> "...on average, individuals have both lower mental distress and higher well-being when living in urban areas with more green space. Although effects at the individual level were small, the potential cumulative benefit at the community level highlights the importance of policies to protect and promote urban green spaces for well-being."[40]

A 2014 study of people's mental health after moving closer to and away from greener areas concludes that:

> "...individuals who moved to greener areas had significantly better mental health...Moving to greener urban areas was associated with sustained mental health improvements, suggesting that environmental policies to increase urban green space may have sustainable public health benefits."[41]

The 2014 update to the UK National Ecosystem Assessment (UK NEA) refers to urban parks being the most visited spaces and how this "has a positive effect on well-being through increased enjoyment and/or increased relaxation."[42]

A 2014 review of health inequalities and access to green space by the Institute of Health Equity (IHE) of the University College of London (UCL) reported that "Green space is linked to greater levels of physical activity and associated health benefits."[43] The IHE cited findings from various studies to support this, including that:

- People living in areas with large amounts of green space were three times as likely to be physically active than people living in areas where there is little green space[44].
- Access and proximity to green space are unequally distributed across the population. For example, the most affluent 20% of wards in England have five times the amount of green space compared with the most deprived 10% of wards[45].
- People who live in the most deprived communities are ten times less likely to live in the greenest areas than people who live in the least deprived communities[46].
- Distribution of green space is also related to levels of urbanisation which exposes people to multiple stressors from noise, pollution, crowding, fear of crime and limited access to good quality green spaces[47].
- A study designed to test the association between green space and changes in the body mass index (BMI) of predominantly economically disadvantaged children found that, after controlling for ethnicity, gender, age and socioeconomic status, children living in areas with more green space had lower BMI scores than children living in areas with less green space. Higher levels of green space were associated with lower BMI scores over a two-year period. This may be the result of increased physical activity and time spent outdoors[48].

A 2018 government-commissioned study further confirmed that proximity to green spaces reduces mortality rates and improves mental wellbeing[49]:

- Living in greener environments is associated with reduced mortality.
- Socio-economic health inequalities tend to be lower in greener living environments.
- There is strong and consistent evidence for mental health and wellbeing benefits arising from exposure to natural environments, including reductions in psychological stress, fatigue, anxiety and depression and the benefits may be most significant for marginalised groups.

Actual time spent in green spaces

Researchers have recommended a 'threshold' amount of time spent in nature of 120 minutes a week[50]. A 2019 study found that people spending 120 minutes in green space / having contact with nature in a week reported consistently higher levels of both health and well-being than those who reported no exposure.

Allowing for the need for more study, the study team examined the benefits of accessing green spaces and nature based on the amount of actual time spent outdoors (known as 'direct exposure'), not just on residential proximity, because, as they put it:

> "...Direct exposure, or more specifically in the current context, recreational time spent in natural environments per week, cannot accurately be inferred from neighbourhood greenspace near the home.
>
> "...the amount of greenspace in one's neighbourhood (e.g. percent of land cover in a 1 km radius from the home), or the distance of one's home to the nearest publicly accessible green space or park is only one way of assessing an individual's level of nature exposure...
>
> "That the ≥120 mins "threshold" was present even for those who lived in low greenspace areas reflects the importance of measuring recreational nature contact directly when possible, rather than simply using residential proximity as a proxy for all types of nature exposure. People travel beyond their local neighbourhoods to access recreational nature experiences, and indeed in our own data those who lived in the least green areas had higher odds of spending ≥120 mins in nature than those living in greener neighbourhoods. Impoverished local opportunities need not be a barrier to nature exposure. That the "threshold" was also present for those with long-term illnesses/disability, suggests that the positive overall association in the data was not simply due to healthier people visiting nature more often."

Overcoming isolation

Green spaces can also be part of action to address the isolation and disconnected communities which affects people of all ages and backgrounds, and which has been estimated to cost £32 billion a year[51]. Even so, the government's 2018 loneliness strategy[52] and its 2020 report on progress tend to overlook contact with nature and access to green space[53].

Addressing loneliness in *Urban loneliness and the built environment*, the Future Spaces Foundation reports that "The physical backdrop to our lives – the places where we live, work and socialise – has a huge effect on how unified or isolated we feel day to day" and recommends that incorporating more 'third places' within cities[54]:

> "Open areas where people can socialise without necessarily spending money play an important role in nurturing personal relationships. Local authorities and urban designers should actively seek to design third places – including markets, gardens, plazas, parks and playgrounds – into urban neighbourhoods so communities have safe, vibrant public places where they can spend time with friends, family and neighbours. Policymakers should consider adopting strategies for creating and funding these hubs with a view towards encouraging social connections in the community." (page 42)
>
> "...it's worth thinking about the positioning of cities' green spaces, which have been shown in research around the world to combat loneliness both directly and indirectly, providing enclaves where people can connect with nature and each other." (page 50)

Rural green space

Although rural areas tend to have more green space research indicates that public access to, and the quality of, green space in rural areas is often problematic as amenities such as lighting, safety, upkeep, suitability of paths and play equipment are often of a poor standard[55]. Therefore, it is important that rural green spaces are accessible and well maintained to enable residents to make the most of them.

Visits to National Parks and AONBs can be truly inspirational breaks from everyday life as the government's 2019 review of England's National Parks, AONBs and other protected landscapes identified. The review's recommendations included "a stronger mission to connect all people with our national landscapes", "A night under the stars in a national landscape for every child", and measures "to increase the ethnic diversity of visitors".[56]

CPRE mapped the proximity of England's population to its network of highly protected green landscapes such as National Parks and Areas of Outstanding Natural Beauty (AONBs), and reported that:

- Around 64% of England's population lives within a 15-mile catchment of such protected landscapes leaving 36% of England's population living outside of the 15-mile catchment.
- Of the 27 million people living in England's largest towns and cities 10.4 million are outside of the 15-mile catchment of National Parks and AONBs.
- Almost half of people in England's most deprived areas live outside of the 15-mile catchment and "so are less likely to reap the benefits of landscapes designated for the nation."[57]

Everyone in England *should* be able to access these and other great rural landscapes and spaces as well as having quality green space on their doorstep for the rest (majority) of the time when they cannot readily visit a National Park or AONB.

Where efforts have been made to improve public access in rural areas, especially for groups that tend not to use green spaces, the results and benefits have been notable. For example, the Woodlands Projects sought to improve access to woodland areas of Kent, Devon, Derbyshire, Wiltshire and Nottinghamshire[58].

The projects targeted key groups under-represented in sporting activities: women and girls, disabled people, people from black and minority ethnic backgrounds (BME), under-16s, over-45s and people on low incomes. Projects to improve access to green space and participation of targeted groups included activity days and tree festivals and staff-led activities such as health walks, cycle rides, and nature walks.

The project significantly increased the total number of visitors across three of the projects (other projects did not measure total numbers of visitors), from 391,340 in 2006-07 to 686,905 in 07-08, including an increased number of BME visitors, people aged 16-44 and families, female visitors and increased participation in physical activities.

Section 2: Quality counts

Quality and quantity matter

Both the quality and the quantity of accessible green space matter. A modest patch of mown grass in an area with very little green space is better than no space at all, and it is likely to be valued by people for kicking a ball about or simply for being a break from the dominant built environment. Equally, low quality green spaces can easily become a magnet for unsociable behaviour and can come to symbolise an area's neglect and decline.

Much better for that humble patch to be re-purposed and managed to play a greater, multi-functional role, for example by also providing people with shade (tree cover), exercise (outdoor gyms), and contact with nature such as by having areas to grow food, which can be a focal point for developing skills and confidence, and diverse planting and habitats for wild species to have food and shelter. So much the better if the space can also be used as a link between communities, and so on.

As well as direct health benefits from the use of green spaces and parks covered in this report, this section summarises how quality, multi-functional green spaces and parks also supports public health and relieves pressure on health services and budgets in other ways that deliver on multiple social needs and government aims.

Green space as a money-spinner

As well being an essential health boost, the frequent personal use of parks and green spaces is shown to be worth over £30 billion a year to the UK population according to Fields in Trust's *Green Spaces Index*. That value translates into an estimated saving to the NHS of at least £100 million a year from fewer GP visits and dispensed prescriptions alone.[59]

Those benefits and savings would be considerably higher if everyone could share these immense free "natural health service" benefits by having better and more equal access to local parks, green and open spaces and the nature and other features they offer. As mentioned in section 1, the government's Environment Agency puts the figure at £2.1 bn a year if everyone has proper access to quality green space[60].

Looked at another way, a 2016 study for the government's nature watchdog, Natural England, explored the possible extra costs to health services from declining access to green space[61]. The study explored the potential effects on the health and wellbeing of people who would not exercise elsewhere if their access to green space diminished. For example, the study identified over 700,000 regular walkers who would be unlikely to replace their walks with exercise elsewhere, should the accessibility or quality of their local environment decline. It is estimated that the loss of this space alone could lead to mortality and morbidity valued at over £450 million a year.

Further indications of the kind of financial payback involved are economic valuations of green spaces in Birmingham and in London which have found substantial but often overlooked cost benefits.

In Birmingham, an economic assessment of the health and natural capital benefits of the city's green spaces and parks "reveals that the benefits provided by these valuable natural capital assets have an indicative value of £11.4 billion (gross asset value); calculated over a 25 year assessment period", including:

- £4.6 billion in health benefits. The total annual benefits add up to £619 million.
- The value of Council-managed parks and greenspaces to each resident is approximately £542 every year.
- The total net-value (benefits minus costs) of Council-managed natural capital assets is in the order of £11 billion over 25 years or £594 million annually.
- This means that each £1 the Council spends on parks and greenspaces returns more than £24 to society[62].

A similar assessment of London's public green spaces found that:

- Public green spaces across London have a gross asset value in excess of £91 billion, providing services valued at £5 bn per year.
- For each £1 spent by local authorities and their partners on public green space, Londoners enjoy at least £27 in value.
- Londoners avoid £950 m per year in health costs due to public green space.
- The value of recreational activities is put at £926 million per year.
- The monetary value to the average London household of being in close proximity to a park or green space is over £900 per year.
- These economic benefits are not spread equally across / within boroughs[63].

Research for the London Green Spaces Commission shows that investment in public health interventions which promote exercise in green space in the London Borough Croydon has demonstrably reduced spending on adult social care[64]. Every £100 spent by the Borough on green spaces is estimated to save £12 in social care costs particularly in relation to three health conditions closely related to the lack of physical exercise: stroke, dementia and heart disease. Such savings arising at the same rate per capita in the rest of London would equate to around £10 million per year, the research estimated.

In *Making Parks Count – the Case for Parks*, The Parks Alliance presents a comprehensive and compelling evidence base and business and economic case for the value of parks covering their many and varied health, local economic, environmental and wider community benefits:

> "...how parks in England deliver over £6.6bn of health, climate change and environmental benefits each year including £2.2bn in avoided health costs alone and are worth £140 per year to each urban resident. For every £1 spent on parks in England an estimated £7 in additional value for health and wellbeing and the environment is generated. The case clearly demonstrates that parks are a smart investment. Unfortunately, because these returns have never been properly understood, parks have suffered from years of under funding and there

> remain gross inequalities in access to quality green spaces across the country. Making Parks Count presents the case for turning this around."[65]

A study of conservation activity in nature reserves found that it helped people to feel "significantly better, both emotionally and physically" from anxiety, stress or mild depression they experienced meaning fewer GP visits and greater chance of being fit to return to work.[66] The three-year study by Leeds Beckett University's School of Health & Community found an excellent social return on investment:

- There is an £8.50 social return for every £1 invested in regular volunteering projects which aid healthy lifestyles, physical activity or overcome loneliness.
- For more costly specialised health or social needs projects which connect people to nature, the social return is £6.88 for every £1 invested.

Professor Anne-Marie Bagnall said:

> "We can therefore say with confidence that, based on evidence from independent research, these programmes can be effective in both maintaining good wellbeing and tackling poor wellbeing arising from social issues such as loneliness, inactivity and poor mental health. The significant return on investment of conservation activities in nature means that they should be encouraged as part of psychological wellbeing interventions."[67]

The multi-purpose role and 'natural health service' benefits of quality green space has been described by researchers as a 'triple win' for improved health, reduced heath inequalities and improved environmental conditions, and "Where these multiple benefits are fully appreciated and evaluated, the costs are more likely to be justifiable."[68]

These financial costs, savings and benefits should be factored fully into policies and decisions about land use, the design and layout of development, and ongoing use and aftercare, instead of remaining either hidden or noted in papers and reports and not applied in practice (see Recommendations).

Boosting access to quality green space should be part of the green economic bounce which can help the nation and its finances recover from the pandemic and be better prepared and more resilient in the future.

The need for both quality and quantity are also underlined by a study of England's eight Core Cities plus London by the Royal Institute of British Architects (RIBA) which found "a clear link between land use and public health in cities" especially the availability of quality green space[69]. Using data on life expectancy, child obesity, diabetes and physical activity, RIBA reported:

- Healthier urban areas have more green space and a lower percentage of land taken up by housing.
- "a robust correlation" between people living in urban areas with higher percentages of housing and lower levels of green space being less physically active, more obese and have higher levels of diabetes.
- Healthier areas had a fifth more green space and almost half the percentage of land occupied by housing than those with the least healthy populations.

- That, on levels of diabetes, the five council areas outside London with the lowest levels of diabetes had on average 68.7 per cent of green space and 3.6 per cent of housing. By contrast, the five authorities outside London with the highest levels of diabetes had on average 43.5 per cent green space and 7.1 per cent housing.

Based on interviews with the public, RIBA also reported that "it is the quality, not quantity, of streets and parks that will encourage them to walk more."

RIBA recommended that local authorities in urban areas with less than 50 per cent green space and/or with more than 5 per cent of their area occupied by housing, should liaise with their health and wellbeing board to produce a Healthy Infrastructure Action Plan, as part of their Local (land use) Plan.

Better quality = better experience

It may be unsurprising, but is worth repeating and reflecting, that people's experiences in local green spaces are improved by the quality and natural richness of spaces and places, and this is supported by recent studies on the perception and frequency of use of local green spaces:

- How people perceive both accessibility *and* the quality of local green spaces, and how their perceptions influence their decisions to visit them and to use spaces for physical activity is examined in a 2016 study[70].
- A 2017 study examines the quality of experience through frequency of visits often as part of everyday activity such as walking to work, the shops, school or daily views of green space. Underlining previous evidence on the benefits of greens space and contact with nature and the researchers say that they:

  "demonstrate that nature close to the home is associated with quantifiable benefits to population health. We found measurably better mental health, social health, positive physical behaviour and nature orientation with greater frequency and duration of time spent in nearby nature. We also showed lower levels of depression and greater nature orientation in people who live in greener neighbourhoods."[71]

Moreover, the researchers found that:

> "...the frequency of nature exposure was a stronger predictor than the duration of exposure. This has implications for the design of health interventions. It has been recognised in the sport sciences that short frequent exposures are a time-efficient strategy to induce health outcomes. Thus, people may be able to gain their necessary nature dose while going about their daily activities, such as walking to shops, or spending time in a room with a view of nature."

Heat, heat stress and threats to health

There is growing evidence of how green space, trees and vegetation can help reduce and moderate excessive heat and keep places areas cooler than would otherwise be the case. Meanwhile, urban green space in England alone has declined from 63% to 56% between in 2001 and 2016[72].

Heat and heat stress applies to most locations, and not just during heatwaves, but is particularly witnessed in towns and cities because of the 'urban heat island' (UHI) effect, where heat is retained in urban areas because of a lack of natural soils and vegetation, which has been replaced with a high concentration of buildings, roofs, roads and other heat-absorbing hard surfacing, and which absorbs and re-releases heat.

As a result, people living in towns and cities are particularly - but not exclusively - at risk of heat-related stress and health effects in warmer conditions and especially during extreme heat, because locally-generated heat exacerbates the effects of regional and nationwide heatwaves.

More frequent and dangerous heatwaves are a consequence of a changing climate and are forecast to be more frequent in coming decades. By the 2040s, heatwaves as severe as 2003 could occur every other year[73]. The Met Office has advised that extreme temperature events in Europe are now 10 times more likely than they were in the early 2000s[74]. The Hadley Centre has also advised that:

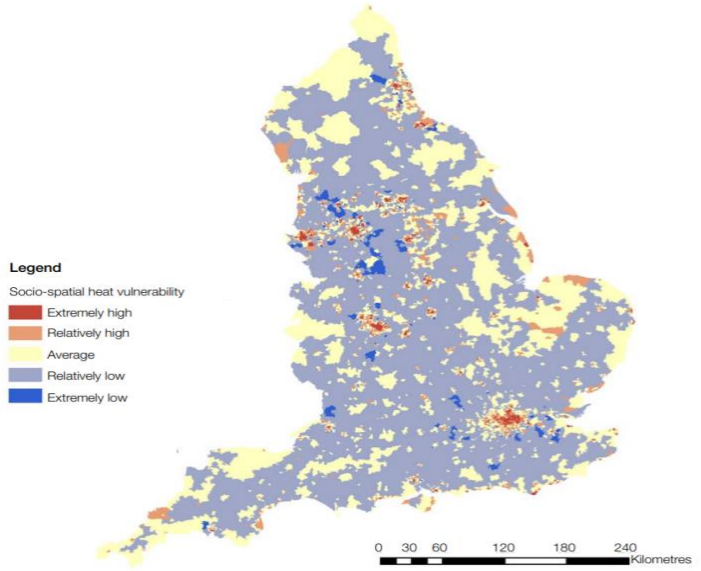
> "Hot summers are expected to become more common. In the recent past (1981- 2000) the chance of seeing a summer as hot as 2018 was low (<10%). The chance has already increased due to climate change and is now between 10-25%. With future warming, hot summers by mid-century could become even more common, near to 50%."[75]

Examining the links between social conditions and vulnerability to heat a Joseph Rowntree Foundation study found that around 10% of neighbourhoods in the north west England, the west Midlands and Yorkshire and The Humber are classified as extremely socially heat vulnerable, while London has 40% of the total number of extremely high socially heat-vulnerable[76].

> "The proportion of English neighbourhoods estimated to have extremely high social vulnerability with respect to heat is around 9% compared to only 1% with extremely low heat-related social vulnerability. Taken as a whole, extreme heat-related social vulnerability is an urban phenomenon (see Figure 7, below) although the inability to recover from heatwaves has a rural dimension given that people living in more remote neighbourhoods have lower accessibility to medical services through GPs and hospitals (see Figure 8d). There is also a coastal component to the distribution of very socially vulnerable neighbourhoods with respect to heat, e.g. along the south coast of England. This partly reflects the pattern of sensitive populations, which is the same in the contexts of both flooding and heat, and is despite many of these areas benefiting from relatively low enhanced exposure to heat compared to the English mean. Overall, 20% of the extremely high cases have an average distance from the coast of less than 1km and 36% are within 2km. There is evidence of joint social vulnerability to multiple climate-related hazards in England since 64% of the extremely

socially vulnerable neighbourhoods in the context of flood are also classed as being extremely socially vulnerable with respect to heat."

Figure 7: Socio-spatial heat vulnerability in England



Source: Boundary data: EDINA UKBORDERS, Crown copyright

Recent heatwaves

Heatwaves caused by excessive heat in the UK are expected to rise from 2,000 to approximately 7,000 each year by the 2050s[77].

The NHS's *Heatwave Plan for England* provides guidance to health practitioners and the public and a heat-health alert service operates across England during June to September. But, in general, the nation appears ill-prepared to prevent harm from excessive heat in homes, schools, workplaces and hospitals and on transport systems.

Public Health England reported on excess deaths observed during the four heatwaves of summer 2018. A total estimated 863 excess deaths were observed compared with 778 deaths in 2017, 908 in 2016, 2,323 in 2006 and 2,234 in 2003[78].

Heatwaves in July 2019 saw NHS attendances of 2,266,913 of which 554,069 were emergency admissions. The attendance figure was a 4% rise over July 2018 (see above) and was the highest attendance figure since data collection began. Emergency admissions were 4.6% higher than in July 2018[79].

Nigel Edwards, chief executive of the Nuffield Trust, said the number of people waiting more than four hours on trolleys to be admitted "would have once been unthinkable, even in the depths of winter" and that "The soaring temperatures in July have taken their toll on patients and staff, with a record number of people turning up to A&E..."[80]

Green space = cooler towns

Kathryn Brown, Head of Adaptation at the Committee on Climate Change, has advised MPs that green space is effective at reducing the urban heat island effect:

> "There are a few studies we have included in the latest climate change risk assessment that looked at this. One of them, which was in Glasgow, looked at increasing green cover by 20%, which is obviously quite a big amount. The estimates for that suggested it could eliminate 30% to 50% of the expected extra urban heat island effect. It is not a temperature metric but is the increase in the urban heat island by 2050. It was looking at reductions in surface temperature of around 2 degrees."[81]

Professor Mike Davies of UCL's Institute for Environmental Design and Engineering, and a member of the Adaptation Sub-Committee of the Committee on Climate Change, also advised MPs that parks can help reduce urban temperatures at a very local level:

> "There is some empirical evidence of parks locally reducing temperatures… there may be some value in having this [green space] distributed across a city such as London to prevent the full development of the potential maximum of the urban heat island."

Studies point to the role of green space in moderating high temperatures in towns.

In general, green spaces of up to half a hectare (>0.5 ha) can cool local air temperatures. For cooling effect across wider urban areas requires green spaces to be closely spaced as cooling decreases with distance from the green space. For example, modelling has suggested that, in temperate urban areas, greenspaces of 3–5 ha need to be placed about 100–150 m apart[82].

A study in Manchester modelled how greater tree cover can affect the shading, air temperature can reduce the urban heat island (UHI) effect and the effects of wind on commercial buildings. Modelling found a reduction of the maximum hourly air temperature of nearly 1.0°C under peak UHI conditions and reduced wind speed of up to 1.0 m/s[83].

One study found that a large park in London helped lower night-time air temperatures by up to 4°C and that the cooling effect extended to over 400 metres from the green space[84].

Modelling has suggested that to achieve cooling of ~0.7°C across London on warm and calm nights, green spaces of 3 to 5 hectares (ha) would need to be situated ~100–150 m apart. Applying this model to a specific area, a study of the extent of the cooling effect provided by the current extent of green space in the London Borough of Camden was estimated along with an estimate of how much more green space would be needed to provide those cooling benefits to the entire borough[85].

The study found that the existing green space in the borough provides and estimated night time cooling effect of up to half a degree (>0.5°C) for 381 hectares of the rest of the borough area, but that the current amount of green space in the borough is not enough for the whole of the borough and its residents to benefit from the same effect on air temperatures.

To achieve cooling benefits of green space across the whole borough of Camden with green spaces of 3 to 5 ha, it would be necessary to allocate either ~360 ha of land to 120 new 3 ha green spaces (making up 16% of Camden) or ~320 ha of land to 64 new 5 ha green spaces (15%; note that these calculations assume rectangular greenspaces).

There are clearly spatial, logistical and economic barriers to achieving such a tight network in highly urban settings but this modelling can assist in the design and re-design of towns, housing and streets to reduce urban heat and achieve other objectives. The estimate also

only includes cooling from green spaces, not other potential effects of having more street trees and 'green infrastructure' such as green roofs and walls.

A study of the urban cooling effects of green and blue spaces in 11 city regions found an average cooling effect of between 0.63 and 0.88 degrees Celsius and an estimated value of this cooling role of £11 billion[86].

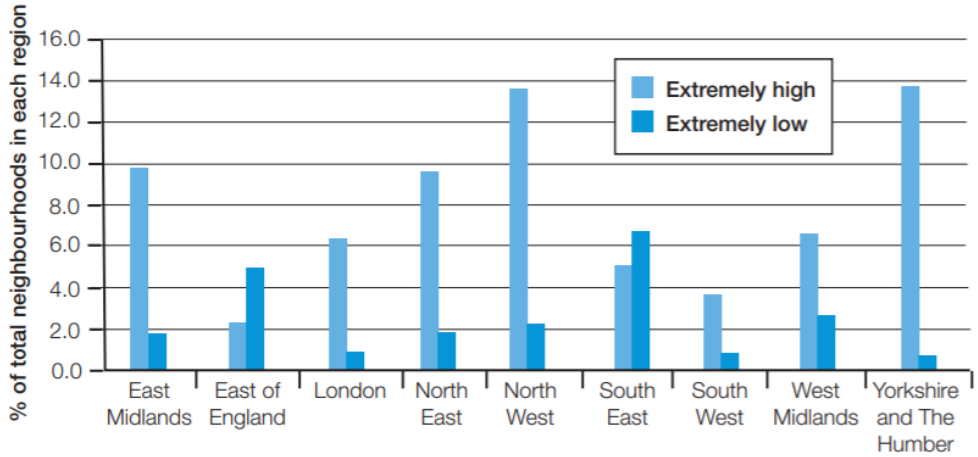
Reducing flood risk

More properties in England are at the risk of being flooded by surface water than from rivers or the sea (3 million compared with 2.7 million). With 45 million people out of England's total population of 54 million (83 per cent) live in towns and cities, urban dwellers face considerable risk of that surface water flooding.

The Joseph Rowntree Foundation's study of climate-related social vulnerability identified social disadvantage in relation to flood risk in England:

> "Patterns of social vulnerability in the context of flood show a strong North–South divide with the North faring the worst. At least 10% of all neighbourhoods in the North West, East Midlands, Yorkshire and The Humber and the North East regions are estimated to be extremely socially flood vulnerable. The South East has the largest proportions of its neighbourhoods estimated to have extremely low socially derived vulnerability for flood compared to other English regions (see Figure 9). Only the South East and East of England regions have a higher proportion of extremely low socially flood-vulnerable compared to extremely high socially flood-vulnerable neighbourhoods. The South East region has nearly 40% of the total number of extremely low socially flood-vulnerable neighbourhoods and the

Figure 9: Proportions of all neighbourhoods in each region estimated to have extremely high or low socio-spatial vulnerability with respect to flood



> North West nearly 25% of the total number of extremely high socially flood-vulnerable neighbourhoods in the whole of England. Although London does not show the same marked extremes as in the other English regions, it does have the largest mean socially derived flood mean."[87]

The data underlines the importance of sensitive housing and other development, the need to incorporate sustainable urban drainage into schemes as standard, the use of green and brown roofing and other ways to retain or divert water, *and* the importance of avoiding the loss of green space and other porous areas (such as front gardens) to hard surfacing.

Moreover, how parks and green spaces are designed and managed can make more of their role in reducing flood risk to nearby homes, business premises and transport services by intercepting, storing and holding back potential flood waters. They can help relieve pressure on drains by reducing the rate and volumes of water entering sewerage systems and limiting the risk of them being overwhelmed during intense rainfall.

Storing carbon

Currently, no reliable and comparable data exists for the specific role of green spaces in absorbing and storing carbon.

The ONS's natural capital accounts currently record carbon storage by woodland, not by green spaces in general. Measuring the likely carbon storage role of trees is easier than estimating the entire contribution of green spaces for their soils, water features, vegetation *and* trees to carbon storage.

Therefore, no comparable data exists for where green space is damaged or in poor condition, such as from eroded or compacted soils, the poor condition habitats, or poor, low grade planting. It is therefore currently unclear both how green space may be adding to carbon emissions, for example by emissions from poor condition soils, and where green space is being prevented from playing a full role in absorbing and storing carbon such as through healthy soils, well-chosen and managed planting of trees and vegetation, and management of lakes and waterbodies, which often feature in public parks - all of which can absorb and store carbon.

However, some area-specific studies *have* pointed to the kind of values that come with investing in and maintaining parks, green spaces and urban greening in general, for example:

- *Manchester:* the i-trees eco assessment of existing tree cover, much of which is in parks and green spaces, estimates that the area's trees are storing 124,330 tonnes of carbon, sequester 4,980 tonnes of carbon every year, and that if a financial value is placed on the free services provided by the tree stock, including in carbon, this would be worth over £3 million every year[88].
- *Oldham:* a study of carbon stored by the trees sampled is estimated at 66,508 tonnes with an associated economic value estimated at £4,246,000. The estimated annual gross carbon sequestered by the sampled trees is 3,168 tonnes, with a CO_2 equivalent of 11,618 tonnes a year. The value of this is put at £202,25[89].
- *London:* the carbon contained in London's parks has been estimated to an extent by using trees and woodland as a proxy. The financial value of carbon stored in Greater London soils at £10 million per year and the value of carbon contained in trees is put at £8 million per year[90].

Reducing noise

The ONS estimates that the role of vegetation in reducing noise in urban areas led to a saving of over £15 million in avoided loss of quality of life years in 2017, and this is thought to be conservative figure[91].

By acting as a physical buffer to noise, vegetation in parks and green spaces, along busy roads, and in neighbourhoods and streets, can counteract noise-related pollution and

disturbance that is a considerable but often over-looked cause of sleep deprivation, stress and other health threats as well as community tension.

The study further estimated the value of the buffering and dampening of noise from urban roads by vegetation in terms of improved amenity and health outcomes. The study identified 167,000 buildings that were benefitting from noise mitigation provided by urban vegetation in the UK. The total annual value of noise mitigation based on the avoided loss of quality adjusted life years (QALY) associated with a loss of sleep, annoyance and adverse health due to noise was £14,431,000.

Cleaner air

The ONS reports the removal or mitigation of some air pollutants by green and blue spaces and natural and semi-natural features saved the nation £1.3 billion in avoided health costs (i.e. from avoided deaths, fewer respiratory and cardiovascular hospital admissions) and amounted to 27,500 years of life saved [92].

That said, because not all air pollutants are the same and not all planting will be of the right kind to mitigate the different pollutants involved, closer study is required to inform the right choice, extent and siting of any planting.

More greenery is good thing for all the reasons set out in this report. Some air quality problems *can* be alleviated by having more and better planting of trees and vegetation, usually in green spaces but also on streets (e.g. street trees and hedging), and buildings, (e.g. green walls and roofing). But the efficacy of planting should not be overstated because it is easy to generalise about planting and air pollution when it is not at all straightforward.

To be clear, this report does not say that there is no benefit from planting to address poor air quality as the ONS data shows, but as the government's Air Quality Expert Group (AQEG) has stated:

> "...the potential to improve air quality with more and better planting of trees and vegetation using vegetation is modest, an important limitation to mitigation of current Air Quality problems with vegetation is that the most polluted areas of cities are those with very limited space for planting, greatly reducing the potential for mitigation using these methods. An integrated policy which separates people spatially from major pollution sources (especially traffic) as far as possible and in which vegetation is used between the sources and the urban population maximises its beneficial effects."[93]

Carefully researched and well-informed planting, siting, and care and maintenance of vegetation, trees and other planting will all help maximise the potential of the right kind of planting to support air pollution aims, as well as other helping to improve the condition, look, feel and natural value of parks and greens spaces.

There is also no escaping the need to address the root causes and sources of poor air quality rather than rely on planting, which should be done more for the many other reasons mentioned in this and other reports than for being a sticking plaster solution.

Good for nature

Last but not least, green spaces are also important for nature especially as more of England's natural habitats continue to be lost, degraded or mismanaged.

Due to intensive farming practices, pollution, destruction of habitat and creeping urbanisation, which often sees the natural or semi natural habitats wild species need being replaced with insensitively built areas often characterised by swathes of hard surfacing for roads, car parks, and service areas, “Nature continues to be under pressure in England”.[94]

Properly managed and in nature-sensitive ways, the parks and green spaces we use can also be havens, not just refuges, for many wild species of plants and animals, including aquatic species in river and water bodies and seasonal migratory species from birds to eels.

Studies show how different types of green spaces (parks, gardens, allotments etc) can be surprisingly rich in wild species even if they are not officially nature reserves. For example, an astonishing 555 different species of insect have been recorded in an “ordinary park in Peckham, south east London” described as “not a nature reserve and has nothing special to warrant it as such” [95].

Although allotments are not covered by the data in this report, which draws on ONS data which excludes allotments, they are proven for their role in local food growing, skills, exercise, community and health. These benefits are often overlooked as is the role of allotments in supporting nature such as their value for bees and other pollinating insects.

A 2019 study of land uses across 360 sites in four British cities (Bristol, Edinburgh, Leeds and Reading) found "that residential gardens and allotments (community gardens) are pollinator ‘hotspots’: gardens due to their extensive area, and allotments due to their high pollinator diversity and leverage on city-scale plant–pollinator community robustness.”[96]

Section 3: The decline of green space quality and quantity

Many areas of England are blessed with decent green space and parks consistent with its 'green and pleasant land' image but, as this report shows, the general decline in quality provision and investment, and consequences this has for people's health and wellbeing and opportunities, cannot be denied.

Other reports have warned about the loss and decline of green spaces, parks, and nature areas. To us, given the evidence set out in this report, that ongoing decline goes against Benjamin Franklin's "an ounce of prevention is worth a pound of cure" axiom, which government guidance on the sound use of health budgets appears to back:

> "Evidence shows that prevention and early intervention are effective in improving or maintaining health and represent good value for money. Not only do well-chosen interventions implemented at a scale help to avoid poor health and reduce the growth in demand on the NHS, they can also reduce pressure on other public services and support economic growth."[97]

In this section we look at several factors which combine to affect the amount and quality of green space available to communities which, in turn, also undermine the government's ability to deploy green spaces in smarter strategies for health, community cohesion, land use, environmental aims and more.

Green space standards

As shown in this and other reports, inequalities of green space access are marked and it is clear that different parts of England, and even neighbouring areas in the same vicinity, provide different quantities and qualities of space. That results in many people lacking adequate access to quality green and open space meaning they also lose out on the variety of health and other benefits others routinely enjoy.

Since 1997, Green Flag Award® has recognised well managed parks and green spaces and set quality standards for the management of recreational outdoor spaces[98].

Any green space or accessible park can be entered for an award. Winning spaces can hoist their Green Flag and many will be seen in local authority-run public parks although formal gardens, nature reserves, woodlands, allotments, churchyards, hospital grounds and university campuses are also eligible. The scheme seeks to:

- ensure that everybody has access to quality green and other open spaces, irrespective of where they live.
- ensure that these spaces are appropriately managed and meet the needs of the communities that they serve.
- establish standards of good management.
- promote and share good practice amongst the green space sector.
- recognise and reward the hard work of managers, staff and volunteers.

Awards are assessed on eight criteria: A welcoming place; Healthy, safe and secure; Clean and well maintained; Conservation and heritage; Community involvement; Marketing; Management; and, Sustainability.

Keep Britain Tidy administers the scheme in England on behalf of the Ministry of Housing, Communities & Local Government and says that "Winning a Green Flag Award® visibly demonstrates to the local community that a clear improvement has been made to a site."

Notwithstanding the government's support for green and open spaces in its planning policies on paper (see Appendix) too many existing spaces on the ground remain under threat from the thrust of the planning system in favour of more development, often of questionable merit, quality and need.

The National Planning Policy Framework (NPPF paragraph 97) also provides a get out clause for local planning authorities and developers to remove green spaces regarded as "surplus to requirements", if an assessment of existing green space or sports and recreational provision shows that their present use is outweighed by other considerations.

Without national standards for the quality and quantity of green and open space, provision depends on whether local planning authorities set - and landowners and developers follow - good polices, and observe good practice and advisory guidance such as Natural England's archived *Accessible Natural Green Space Standards*[99].

As mentioned earlier in this report (see heatwaves), and noted by Public Health England's July 2020 *Improving access to greenspace* report, urban greenspace is in decline:

> "...the Committee on Climate Change found that the total proportion of urban greenspace in England declined by 8 percentage points between 2001 and 2018, from 63% to 55%."[100]

When MPs looked at green space in the context of the rising incidence of health-threatening heatwaves they recommended that planning policy for England should include green infrastructure targets for town and cities:

> "The Government should introduce an urban green infrastructure target in the National Planning Policy Framework to ensure towns and cities are adapted to more frequent heatwaves in the future."[101]

> "Green spaces have been proven to reduce the urban heat island effect, however urban green space has declined in England. The Government's commitments to green towns and cities are not measurable or target driven and do not link green spaces to urban heat island reduction. The Government should introduce an urban green infrastructure target as part of the metrics for the 25 Year Environment Plan and in the National Planning Policy Framework to ensure towns and cities are adapted to more frequent heatwaves in the future. The Government should aim to increase urban green space to 2001 levels, and higher if possible. The importance of shaded spaces in urban areas should be included in the Framework's section on 'promoting healthy and safe communities', so that all local planning authorities have to demonstrate their provision of shaded spaces in the clearance process of their local plans. (Paragraph 91)" [102]

The effect of funding cuts

Diminishing funds and budget cuts have been affecting the quality of green space and raising pressures to sell off green space in areas where provision is limited. Between 2016-17 and 2018-19, local councils made over £15million of cuts to budgets to maintain and improve parks and open spaces[103].

Public Health England states that:

> "Reduced local government budgets are of course one reason investment in green infrastructure is under pressure. But it is also because greenspace has traditionally been viewed as a liability, with the social, economic, health and environmental contributions to society rarely being acknowledged. Local areas need first to recognise and understand the wide range of benefits people accrue from green infrastructure, and then be able to capture and demonstrate their value so that they are not overlooked or forgotten when difficult local finance decisions must be made."[104]

Traditionally, councils have run and managed parks and open spaces, but unlike provision of waste collections and other services, there is no statutory requirement for local authorities to provide parks and green and open spaces.

Combined with falling budgets and no ring-fenced funding, the result has been rising pressure on park and green spaces such as from reduced maintenance and management, contracting out of services, and even giving in to pressures to sell land for development to recoup funds to fill budget gaps, especially to fund statutory services, which parks are not.

The effect of cuts is not new as parks and green spaces have faced a general decline in funds and quality for several decades with many urban parks experiencing a decline in quality toward the end of the 20th century.

As far back as 2001, a public parks assessment by the Urban Parks Forum identified local authority budget cuts as the main reason for decline and estimated cumulative under-investment of £1.3 billion between 1979/80 and 1999/2000 leading to the loss of cafes, toilets and other facilities, reduced management by dedicated park keepers and a trend toward low quality amenity grass and other easy to manage landscapes. Responding to the Forum's survey, only 18 per cent of local authorities reported that their parks were in good condition while the quality of 39 per cent of local authority managed open spaces had deteriorated.

In 2002, the government-commissioned Urban Green Spaces Taskforce reported that poor-quality parks and green spaces had left many communities with depressing, poorly used, inaccessible and often dangerous spaces - characteristics of urban decline[105]. The declining quality of green spaces was also reported in 2002 by MPs who noted that:

> "Following the report of the Urban Green Spaces Taskforce in 1999, the Government acknowledged that in general the quality of green space had declined in recent years. The Government committed to a vision of a network of quality green spaces for all communities and a programme of work to bring about improvements.... In 2002 the Urban Green Spaces Taskforce reported that under-investment in green space was a key factor in the decline in the infrastructure and condition of parks and green spaces in many areas."[106]

Noting that "In one in six urban local authorities the quality of green space is declining" the MPs recommended that the government should particularly focus on those with high levels of social deprivation.

The Policy Exchange think tank reported in 2013 on the importance parks for public health and well-being, bearing out the evidence in this and other reports. Again in 2014, Policy Exchange reported on how better use of data could help improve spaces and how new funding sources the development of park improvement districts, green prescribing and endowment funds could support green spaces[107].

The funding crisis facing parks and green spaces came to the fore in 2014 when the Heritage Lottery Fund (HLF) declared that "Parks are under direct threat" with consequences for the public health and other roles played by green spaces for communities and for nature.

State of UK Public Parks 2014: Renaissance to risk?[108] was the HLF's first comprehensive study of the condition and management of the UK's public parks and it concluded that without proper funding "parks are at serious risk of rapid decline and even being sold off and lost to the public forever".

The report also identified that deteriorating conditions, standards and potential threats to parks and green space because:

- 86% of parks managers reported budget cuts since 2010, a trend they expect to continue, meaning reduced management and security of parks.
- 45% of local authorities are considering either selling parks and green spaces or transferring their management to others, and that this may result in the loss of parks and other green spaces, the management of parks being split between organisations, community groups having to fill gaps in services.
- 81% of council parks departments have lost skilled management staff since 2010 and 77% have lost front-line staff.

The HLF's follow up in 2016 reported that:

> "Without urgent action the continuing downward trend in the condition of many of our most treasured parks and green spaces is set to continue."[109]

Fields in Trust's 2015 research[110] also found public concern at declining quality and potential loss of cherished green spaces:

- One in five people (16%) reporting that their local park or green space has been under threat of being lost or built on.
- Two thirds (69%) saying that the loss of parks would be detrimental to children's development and half of respondents admitted that they would be less active if their local green space was lost.
- Nearly all people (95%) agreeing that parks and play areas should be protected from development.
- Almost half of people reinforcing the evidence of green space benefits in saying that use of their local park aids their health (48%) with 70% of 16-24 year olds also feel less stressed from their access to green space.

A 2017 inquiry by MP's into the predicament facing public parks reported that:

> "...parks are at a tipping point and face a period of decline with potentially severe consequences unless their vital contribution to areas such as public health, community integration and climate change mitigation is recognised."[111]

Against the backdrop of reduced funding since 2016 the government has funded 352 'pocket parks', defined as being approximately from the size of 1 tennis court to the size of 16, between 0.02 to 0.32 hectares.

On 3 March 2020 the government launched a third round of pocket parks. The latest funding of £1.35 million is to create 19 new urban pocket parks and revive 49 run-down

urban spaces for their transformation into “thriving ‘pocket parks’ and green spaces to increase biodiversity, encourage community integration and tackle loneliness.”[112]

The state of urban nature

The condition of nature in parks, green and blue spaces and nature reserves and how they are funded and managed matters because, if they are not functioning well as havens for nature not only are they not providing the ecological services they should, especially when compared with streets and town centres, but they will not be especially useful as places for people to reap the rewards of spending more time in nature whether for leisure, relaxation, learning or formal education.

The Office for National Statistics (ONS) has reported on the ongoing poor condition of many of England’s treasured Sites of Special Scientific Interest (SSSI) in urban areas. The ONS finds that over half of urban area SSSI’s (53%) are in unfavourable condition and that there has been little improvement over time:

> "...the extent of SSSIs in England’s urban areas was 9,685 hectares, which is a slight increase to that observed in May 2018 (9,590 hectares). When looking at the condition of the SSSI sites, 45% were considered in favourable condition, whereas over half of these sites were registered as in an unfavourable condition. Again, the extent and condition of site have not changed much from those observed in May 2018. When comparing this to all SSSIs in England, this is not much different, with 51% of sites registered as unfavourable.”[113][114]

SSSI’s are only one indicator of nature’s condition but they matter for their role in supporting a host of wild species and because they are supposed to be protected in law.

Other indicators for nature in urban areas, such as birds and mammals being in decline, do not paint an especially rosy picture of the nature on our doorsteps being in good condition.

The nature of new development

Insensitive development and badly designed, planned and delivered housing are a driver of England’s once distinctive and nature-rich landscapes becoming ‘blandscapes’ which are increasingly inhospitable to nature. So much so that the nation’s wildlife is officially in long term decline[115].

How new housing and other building schemes treat land, existing wild species and habitats, and provide new green space falls far below what is needed if the housing and development sectors are to play their full part in the recovery of nature and ecosystems in England.

Some better developers have raised their game, for example by retaining existing green spaces and natural features in their schemes and making quality nature features and green spaces central to their plans, rather than an afterthought or fringe feature.

Good developers are few and far between and the majority prefer a clear site, stripped of features which would impede works on site and would, if retained, prevent maximum space for housing, parking and identikit gardens of grass, patios, fencing and low value planting that provide so little value to nature. Low grade communal play space and areas of amenity grass and hedging may be added, if those do not eat too much into profits.

Some ways for how housing developments could be better for green space and residents have been proposed by Kate Swade of the Shared Assets consultancy[116]:

> "The role of developers in providing solutions (to this) is an interesting one. The short termism of the system in which they operate means that, with a few exceptions, they have little interest in medium and long term green space management.
>
> "One thing developers could do is leave more "undone" – leave spaces for the community to grow into, and to decide what it wants to do with. The urge to fill every gap with a privet hedge is understandable from a presentation point of view (we're done! this is finished!), but quickly becomes a long-term management burden with little social, economic or environmental value.
>
> "What if they were to hold back some of the money they would spend on landscaping and planting into a pot for spending at a later date?"

As the government pushes more reform of land use planning in England, further easing the way for house builders and the development sector to get their schemes approved and built, how they operate and whether they are contributing to or detracting from action to restore nature, curb climate change and support health public scrutiny may increase.

Will developers continue to argue against the retention of existing nature on sites and put in green space of low nature value, as an afterthought on already packed sites? Or will the sector provide proper access to quality green space, fully support retention of existing natural features, and ensure that any new natural / semi-natural features are ecologically coherent?

Funding and solutions

Reflecting on the evidence of how green space and parks support so many social 'goods', and on public desire for more use of green and open spaces during the C-19 lockdown, some have already proposed ways to rethink how green spaces and parks are funded and their benefits secured.

The National Trust, Sustrans, Create Streets and the Heritage Lottery Fund (HLF) joined with others including the Mayors of the west Midlands, Andy Street, and Bristol's Marvin Rees, to recommend that the government should invest £5.5 billion to boost public access to green spaces, especially in areas lacking proper provision [117]. The grouping proposed:

- *The greening of urban streets and neighbourhoods* to create street parks and link up local green spaces to provide seamless, safe green and blue routes for waling and cycling for all, including for everyday trips to work, school and for leisure.
- *Upgrading sub-standard parks and green spaces* to be fit for purpose in the 21st century with the quality natural habitats, walking and cycling routes, and facilities for communities to significantly gain via play, sport and recreation.
- *Creation of large regional parks and forests on urban fringes,* to make the most of existing green belt, linking town with countryside, and providing millions of people with access to green and wild spaces without needing to use a car.

The grouping assessed that these activities would result in some £200 billion in health and social benefits, in keeping with the substantial evidence highlighted in this and other report on the advantages of routine contact with nature, green and open spaces whether for recreation and exercise, leisure and learning, or more.

The Social Market Foundation has also reflected on C-19 and the funding squeeze and has suggested ways to secure funding for parks[118]:

- *Park Districts:* where homeowners with properties near parks pay a small sum in support of local authority parks as occurs in some US cities.
- *Transferring control to non-profits:* many communities have stepped up to care for and watch out for their local green spaces and parks, and although this voluntary contribution makes a difference, whether it can fully fill gaps if and when local councils reduce their role is debatable, but formal charitable foundations may be well placed to provide urban green spaces and SMF cite the way Newcastle City Council has done this.
- *Involving business:* SMF point to how taxpayer funds have provided a financial lifeline for many businesses during the C-19 pandemic and suggest that businesses can return the favour by investing locally in shared green spaces post-pandemic.
- *A new role for the NHS:* many studies, some of the recounted in this report, show how use of parks and green spaces underpins health. SMF suggest that 'green prescribing' can save on health costs and that NHS England could play a more active role in provision of urban green space.

Since 2012, Nesta has also examined new ways to fund and manage green spaces[119].

Section 4: A new analysis of green space deprivation

There is already good work published by other organisations on green space provision some of which features in this report. For example:

- Fields in Trust's *Green Space Index* identifies how much public green space (parks, etc.) is available across the country, including at a small neighborhood level[120], and its accessibility based on a 10-minute walk[121].
- The Design Council has built upon work ten years ago by CABE which identified the relationship between green space deprivation and ethnicity[122], by carrying out in-depth research in six deprived and ethnically diverse areas to study how residents viewed the importance of green space within their areas, how the green space is used, and the conditions needed to improve use [123].
- Office for National Statistics (ONS) maps and datasets on public green space at a small neighbourhood level and on garden space at a larger neighbourhood level [124].
- The Marmot Review called for improving the availability of good quality open and green space, including noting how the roads budget at the time could instead be used to create 1,000 new parks across the country[125] (the roads budget has increased substantially since 2010 while spending on parks has decreased over several decades).
- Public Health England's *Improving Access to Greenspace* and its 2020 update [126].

The data analysis

This analysis builds on this work in the following ways:

- We bring together ONS data on garden space, public green space and access land (heathland, mountains, commons, etc.) to enable identification of those neighbourhoods (average population size of 7,200) which not only lack public green space (including access land) but which also lack garden space[127]. We believe this is a robust methodology for identifying the neighbourhoods most deprived of green space. By using this approach only neighbourhoods with little or no public green space and little garden space will be identified as deprived, whereas neighbourhoods with little or no public green space but on average very large gardens will not.
- We use a 5-minute walk measure of accessibility rather than a 10-minute walk. This is based on the current Natural England Standard[128] that people should be within a 5-minute walk of 2 hectares of green space[129]. Some people will travel further, for example to take part in sports at playing fields. In general, though, research suggests "a distance of approximately 5-6 minutes foot walk from home to be a threshold beyond which the frequency of greenspace use sharply declines."[130]
- The Green Space Deprivation Rating (see diagrams) we have developed is based on:
    - Scoring - the proportion of people within a neighbourhood who are within 5 minutes of 2 hectares of public green space, the average amount of garden space per capita within the neighbourhood, and the total quantity of green space per capita (including Access Land)[131].
    - Assigning neighbourhoods to A-E rating – the A rating has most green space and rating E has least green space. This assignment is necessarily subjective because the value people on the type of green space will differ. For example, some people may prefer a small garden to work on more than they do a larger public green space nearby, whereas others may enjoy the larger space for games or exercise.

- We have analysed the Green Space Deprivation Rating to understand the relationship between green space and income, and green space and ethnicity.
- We graphically identify the neighbourhoods and rating, as well as provide data on the number and proportion of neighbourhoods within a local authority area that are most deprived of green space (Rating E).

Green space scoring

We scored each neighbourhood (MSOA) according to three factors.

Garden space
- 1 = lowest quartile (very small)
- 2 = second lowest (small)
- 3 = second highest (large)
- 4 = highest quartile (very large)

Total public green space:
- 1 = <9m2 (very small)
- 2 = >9m2 but < 33m2 (small)
- 3 = >33m2 but < 50m2 (large)
- 4 = >50m2[3] (very large)

Proportion of population within 5 minutes from 2 hectares of public green space
- 1 = < 25%
- 2 = 25% to 50%
- 3 = 50% to 75%
- 4 = > 75%

Categories	Total green space	Access	Gardens
RATING E (Least green space) Very small gardens and very small amount of public green space	1	1 to 4	1
Very small gardens and small amount of public green space more than 5 minutes' walk for 75% or more of residents	2	1	1
RATING D Small gardens with very small amounts of green space more than 5 minutes' walk away for 75% or more of residents	1	1	2
Very small garden and large or very large amounts of green space within 5 minutes' walk, although more than 5 minutes' walk away for 75% or more of residents	3 to 4	1	1
Very small garden with small amount of green space less than 5 minutes' walk for up to 75% of residents	2	2 to 4	1
Small garden with very small amounts of public space less than 5 minutes' walk for up to 75% of residents	1	2 to 4	2
Small garden with small amount of public green space more than 5 minutes' walk for 75% or more of residents	2	1	2
RATING C Small garden and large or very large amounts of public green space more than 5 minutes' walk for 75% or more of residents	3 or 4	1	2
Small garden and small amounts of green space less than 5 minutes' walk for up to 75% of residents	2	2 to 4	2
Large or very large garden and very small or small amount of public green space more than 5 minutes' walk for 75% or more of residents	1 or 2	1	3 or 4
RATING B Very small or small garden but large or very large amounts of public green space less than 5 minutes' walk for up to 75% of residents	3 or 4	2 or more	1 or 2
Large gardens and a small amount of public green space less than 5 minutes' walk for up to 75% of residents	1 or 2	2 or more	3 or 4
RATING A (Most green space) Large or very large gardens and large or very large amounts of public green space	3 or 4	1 or more	3 or 4

Weaknesses

Our analysis is not without weaknesses. For example:

- The ONS choice of what is and is not public green space, which we have also used, errs on the side of caution and does not capture all green spaces for which there may be public access. For example, it excludes allotments, some of which have public access while others do not. The dataset does not include wildlife sites owned or run by The Wildlife Trusts or others, some of which may be freely open to the public. Nor does the ONS dataset include public footpaths to open countryside, and beaches, which are not 'green' spaces but are important open spaces.
- The data does not capture the quality of the green space. This is a major issue for people and for wildlife. For example, if green spaces are perceived as unsafe, they will not be used and if they are maintained as short grass they will bring limited benefits for nature.
- The data does not capture green infrastructure such as street trees, planters, green roofs and parklets all of which enhance the quality of an area and can provide important corridors for nature.
- The data does not capture the extent to which communities engage and shape how local green spaces are managed, maintained and enhanced. As covered in this report, the benefits of green space go beyond availability to how people engage with it alone or with others, and how it supports aims such as carbon storage.
- The rating system we use is necessarily subjective and alternative approaches are possible. We are making the full data set available for others to use and would welcome others to use it to test alternative analytical approaches.

Use of the analysis

Allowing for unavoidable weaknesses of our analysis, and any analysis of green space based on currently available data, the findings have significant utility. For example:

- For the government to identify which local authorities most need proper finance and powers because of their high proportion of neighbourhoods most deprived of green space (particularly ratings D and E).
- For local councils and citizens groups to support the targeting of practical projects and campaigning.
- To support the work of the National Academy for Social Prescribing, Natural England and others in their work on green space, public health and other beneficial aims.
- To build upon and support the work of others in the Environmental Justice field working to demonstrate the strong correlation between poverty, deprivation, ethnicity and environmental degradation, to persuade policy makers to address these issues, which are a gift to our leaders.

Section 5: Results of analysis

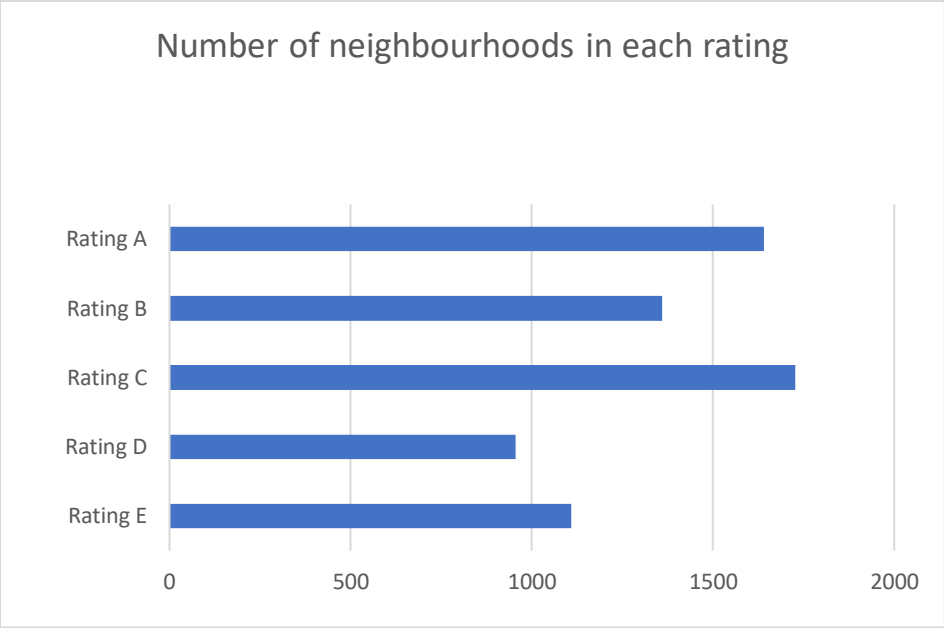
1,108 neighborhoods in England are rated E.

E rated neighbourhoods are the areas most deprived of green space.

9.6 million people live within these neighbourhoods, which is roughly 1 in 5 of the population of England.

In addition, 955 neighbourhoods are rated D, which still represents very poor green space provision.

E and D areas should be prioritised for increasing the quantity of green space, while ensuring green space elsewhere is of quality and that other green infrastructure is in place.

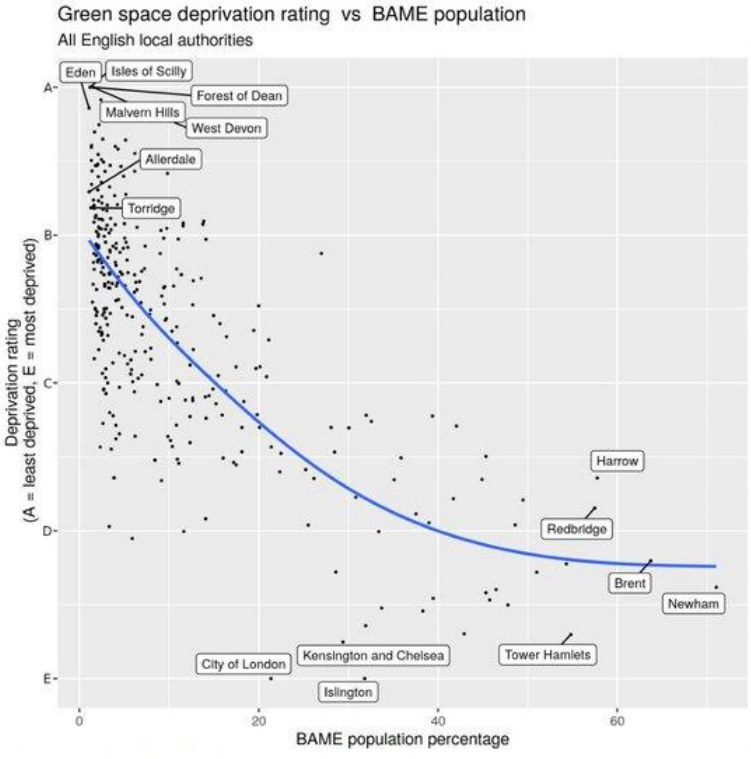


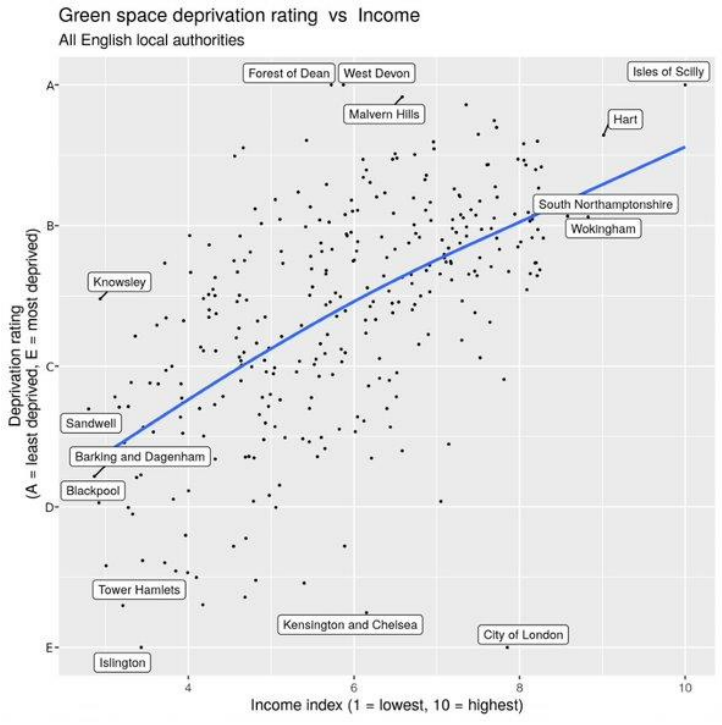
As with the CABE analysis ten years ago, we find a strong correlation between green space deprivation and ethnicity. 38% of BAME people live in neighbourhoods rated E. If you are a Black or Minority Ethnic person you are more than twice as likely to live in a neighbourhood rated as E (the most greenspace deprived) as a white person is. The graph below shows that local authority areas with a mostly White population have much more green space that those local authority areas with a large BAME population.

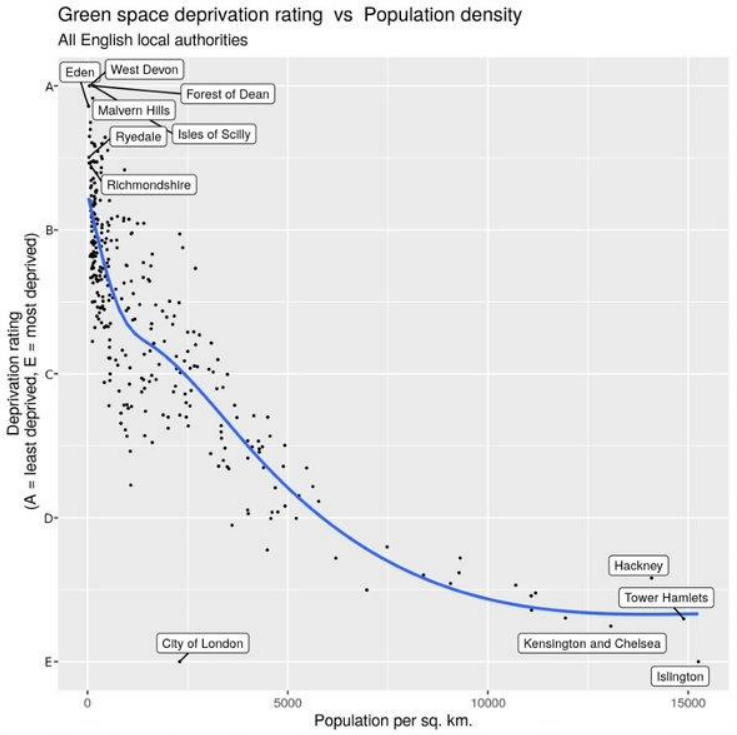
There is also a correlation between income and green space rating, although it is not as strong as for ethnicity. Average incomes in neighbourhoods rated E are low, but in approximately a fifth of these neighbourhoods the average income is higher than the average income in England (i.e. they not all are poor areas). The lack of green space in some wealthy areas of London, such as Kensington and Chelsea, is an example of this.

There is also, perhaps not surprisingly, a strong relationship between green space deprivation and population density. Not that green space provision and population density are not compatible, they are. Areas of population density can have ample green space but

currently space is used instead for cars (roads, on street car parking, car parks) despite the areas most deprived of green space having lower levels of car ownership.







Further analysis has also been carried on the relationship between ethnicity and the quantity of public green space, ethnicity and accessibility to green space[132], and ethnicity and garden space. Similarly, the analysis has been carried out between income and these three factors (quantity of public green space, accessibility, and garden space).

Graphs of all of these are available in the Appendix. The same correlations as seen above exist for garden space and public green space but not for access to green space. Areas with a higher proportion of BAME residents or low average income have a greater proportion of their population within 5 minutes-walk of public green space than wealthier areas or areas with a higher proportion of white people. This is at least in part due to the higher density populations in these areas and the historical recognition of the need for parks in densely populated areas.

We have also looked at the correlation between the political control of councils and green space deprivation. We have done this in two ways:

- First, we looked at the political control of the local authority areas with the greatest number of the neighbourhoods that are rated E. Inescapably, most are under the control of the Labour Party. Of the 50 local authority areas with most rated E neighbourhoods 40 are Labour Party controlled, 6 are Conservative Party controlled, and in the remaining 3 councils there is no overall control (in 1 Labour is the largest party, 1 the Green Party is the largest, and the Conservatives the largest in the remaining).
- Secondly, we have looked at all the neighbourhoods rated E and identified which political party is in control of the council. This shows that two-thirds of neighbourhoods rated E are in Labour Party council areas with a fifth in Conservative Party councils.

Correlation being different from causation, it would be incorrect to suggest that the majority of neighbourhoods being rated E being within Labour council areas means that it is their fault; instead it is the result of decades of neglect by national and local politicians of all political persuasions. But it does suggest that the government will get the full support of the main opposition party if it honours its commitment to ensure that everyone can access both the quantity and the quality of parks and green spaces needed for people's physical and mental health, whereas if the government fails to do so it will face significant and sustained political pressure from Labour and others.

Below is a list of local authority areas identifying the number of neighbourhoods in each rating. The list is ordered by the numbers of E rated neighbourhoods.

Local authority area	**Number of neighbourhoods (MSOAs)**	**Number of neighbours in each rating**				
		A	**B**	**C**	**D**	**E**
Lambeth	35	0	2	0	5	28
Birmingham	132	8	37	33	27	27
Tower Hamlets	32	0	2	0	3	27
Haringey	36	0	5	0	6	25
Newham	37	0	5	0	9	23
Islington	23	0	0	0	0	23
Manchester	57	0	8	7	21	21
Wandsworth	37	0	5	0	11	21
Southwark	33	0	3	1	8	21
Camden	28	0	3	0	5	20
Hammersmith and Fulham	25	0	2	0	3	20
Lewisham	36	0	3	0	14	19
Brent	34	0	7	1	7	19
Westminster	24	0	4	0	1	19
Liverpool	61	5	13	9	16	18
Bristol	55	3	15	10	9	18
Waltham Forest	28	0	1	3	6	18
Leicester	37	3	7	4	7	16
Kensington and Chelsea	21	0	0	0	5	16
Leeds	107	17	22	31	22	15
Hackney	28	0	3	0	10	15
Ealing	39	0	2	1	22	14
Croydon	44	4	6	10	10	14
Southampton	32	0	8	2	8	14
Brighton and Hove	33	4	8	3	4	14
Bradford	61	12	4	17	15	13
Enfield	36	2	5	2	14	13

Kingston upon Hull	32	0	4	5	10	13
Greenwich	33	1	7	4	8	13
Redbridge	31	1	6	3	8	13
Hounslow	28	0	7	0	8	13
Portsmouth	25	1	5	1	6	12
Coventry	42	2	6	11	12	11
Medway	38	4	7	9	7	11
Sunderland	36	5	3	13	4	11
Sheffield	70	11	17	13	19	10
Barnet	41	4	7	6	14	10
Nottingham	38	2	8	11	7	10
Plymouth	32	1	6	8	7	10
Bolton	35	4	8	8	5	10
Blackburn with Darwen	18	2	4	1	1	10
Harrow	30	2	5	5	9	9
Wigan	40	5	12	9	5	9
Blackpool	19	0	2	5	3	9
Merton	25	1	7	1	8	8
Kingston upon Thames	20	0	4	2	6	8
Swindon	27	3	4	8	4	8
Sefton	38	6	11	10	3	8
North East Lincolnshire	23	2	5	6	2	8
Barking and Dagenham	22	0	7	0	8	7
Sutton	24	2	6	3	6	7
Slough	14	0	1	2	4	7
South Tyneside	23	1	8	4	3	7
Kirklees	59	10	5	28	10	6
Bournemouth, Christchurch and Poole	48	8	13	13	8	6
Dudley	43	2	14	14	7	6
Salford	30	1	8	8	7	6
Buckinghamshire	67	27	10	18	6	6
Wolverhampton	33	0	9	14	4	6
Reading	18	2	2	5	3	6
Derby	31	2	16	6	1	6
Oldham	33	4	4	6	14	5
Sandwell	38	1	8	13	11	5
Bexley	28	1	4	10	8	5
Wirral	42	13	11	8	5	5
Havering	30	6	7	8	4	5
Wiltshire	62	30	11	13	3	5
Rochdale	25	3	8	6	3	5

Southend-on-Sea	17	0	5	4	3	5
Norwich	14	1	1	4	3	5
Darlington	15	3	1	4	2	5
Gravesham	13	3	1	2	2	5
North Tyneside	30	2	8	7	9	4
Bury	26	1	7	8	6	4
Luton	21	0	5	6	6	4
South Gloucestershire	32	8	4	11	5	4
Northampton	31	3	9	10	5	4
North Somerset	26	5	2	10	5	4
Cambridge	13	1	2	1	5	4
Northumberland	40	19	6	8	3	4
Hartlepool	12	1	3	1	3	4
York	24	5	4	9	2	4
Basildon	22	4	7	6	1	4
Ipswich	16	1	8	3	0	4
Hillingdon	32	3	7	8	11	3
Oxford	18	1	1	6	7	3
Richmond upon Thames	23	1	8	4	7	3
Gateshead	27	4	6	9	5	3
Calderdale	27	8	4	8	4	3
Preston	17	2	4	4	4	3
Worthing	13	2	2	2	4	3
Canterbury	19	7	4	1	4	3
Welwyn Hatfield	16	4	0	6	3	3
Bedford	20	6	4	4	3	3
Thanet	17	3	4	4	3	3
East Riding of Yorkshire	43	15	6	17	2	3
Middlesbrough	19	2	4	8	2	3
Lancaster	18	6	4	3	2	3
Eastbourne	13	3	2	3	2	3
Solihull	29	4	11	10	1	3
Havant	17	0	7	6	1	3
Stoke-on-Trent	34	6	20	4	1	3
Redditch	13	3	3	3	1	3
County Durham	66	16	9	29	10	2
Walsall	39	7	12	10	8	2
Milton Keynes	32	8	12	2	8	2
Bromley	39	8	12	12	5	2
Peterborough	22	5	3	7	5	2
Cheshire West and Chester	47	12	6	23	4	2

Wakefield	45	14	15	10	4	2
Stockton-on-Tees	24	4	5	9	4	2
Thurrock	19	2	2	9	4	2
Exeter	15	3	2	4	4	2
Stevenage	12	0	3	3	4	2
Rushmoor	12	1	3	2	4	2
Gosport	10	0	3	1	4	2
Dartford	13	3	2	3	3	2
Burnley	12	2	3	2	3	2
Central Bedfordshire	33	13	3	13	2	2
Colchester	20	4	4	8	2	2
Erewash	15	1	4	6	2	2
Watford	12	1	1	6	2	2
Pendle	13	3	1	5	2	2
Gloucester	15	0	7	4	2	2
Chelmsford	21	7	6	4	2	2
Worcester	14	0	6	4	2	2
Hyndburn	9	1	2	2	2	2
Corby	8	2	1	1	2	2
Folkestone and Hythe	14	5	1	5	1	2
Lincoln	11	2	3	3	1	2
Charnwood	22	5	8	7	0	2
Harrogate	21	9	3	7	0	2
New Forest	23	13	2	6	0	2
Kettering	11	1	2	6	0	2
Telford and Wrekin	23	9	7	5	0	2
North Hertfordshire	15	4	4	5	0	2
Broxbourne	13	1	7	3	0	2
Barrow-in-Furness	10	0	6	2	0	2
Test Valley	15	7	4	2	0	2
South Lakeland	14	11	0	1	0	2
Tameside	30	2	6	10	11	1
Trafford	28	0	7	13	7	1
Newcastle upon Tyne	29	1	9	11	7	1
Stockport	42	7	15	14	5	1
Basingstoke and Deane	22	8	2	6	5	1
Doncaster	39	8	12	14	4	1
Crawley	13	0	2	6	4	1
Halton	16	4	3	4	4	1
Arun	19	2	4	9	3	1
Dacorum	22	5	9	4	3	1

West Suffolk	21	12	1	4	3	1
Braintree	18	7	4	3	3	1
East Staffordshire	15	5	3	3	3	1
Cornwall	73	40	6	24	2	1
Cheshire East	51	13	13	22	2	1
Nuneaton and Bedworth	17	0	4	10	2	1
East Suffolk	30	14	4	9	2	1
Bath and North East Somerset	27	7	9	8	2	1
Torbay	17	2	5	7	2	1
Maidstone	19	6	3	7	2	1
South Ribble	17	4	3	7	2	1
Great Yarmouth	13	2	1	7	2	1
King's Lynn and West Norfolk	19	9	1	6	2	1
Barnsley	30	11	11	5	2	1
Castle Point	12	4	1	4	2	1
Woking	12	4	1	4	2	1
Bracknell Forest	15	5	4	3	2	1
Guildford	18	10	3	2	2	1
Tendring	18	4	1	11	1	1
St. Helens	23	2	10	9	1	1
South Somerset	24	11	3	8	1	1
Swale	17	4	3	8	1	1
Ashfield	16	3	3	8	1	1
Epping Forest	17	6	1	8	1	1
North Lincolnshire	23	8	6	7	1	1
Wyre	14	3	5	4	1	1
Fareham	14	4	4	4	1	1
Teignbridge	19	12	1	4	1	1
Elmbridge	18	7	6	3	1	1
South Kesteven	16	6	5	3	1	1
Scarborough	14	5	4	3	1	1
Tamworth	10	1	4	3	1	1
Stafford	16	9	2	3	1	1
Lewes	13	5	4	2	1	1
Cannock Chase	13	8	1	2	1	1
Adur	8	4	0	2	1	1
Chorley	14	8	3	1	1	1
South Cambridgeshire	20	8	1	10	0	1
West Lancashire	15	2	5	7	0	1
Bromsgrove	14	5	2	6	0	1
East Devon	20	12	2	5	0	1

Sedgemoor	14	6	2	5	0	1
Lichfield	12	4	2	5	0	1
St Albans	20	10	5	4	0	1
South Oxfordshire	20	11	4	4	0	1
Broxtowe	14	3	7	3	0	1
Fylde	9	0	5	3	0	1
Dover	14	6	4	3	0	1
Mid Suffolk	12	8	0	3	0	1
Three Rivers	12	6	3	2	0	1
Rother	11	6	2	2	0	1
High Peak	11	7	1	2	0	1
City of London	1	0	0	0	0	1
Warrington	25	6	8	7	4	0
Hastings	11	2	2	3	4	0
Harlow	11	0	7	0	4	0
Cheltenham	15	1	5	6	3	0
Somerset West and Taunton	19	7	4	5	3	0
Spelthorne	13	2	3	5	3	0
Windsor and Maidenhead	18	10	2	3	3	0
Wellingborough	10	4	1	2	3	0
Rotherham	33	5	12	14	2	0
Cherwell	19	4	3	10	2	0
Redcar and Cleveland	19	3	6	8	2	0
Huntingdonshire	22	10	4	6	2	0
Dorset	47	31	9	5	2	0
East Hertfordshire	18	8	3	5	2	0
Hertsmere	13	3	3	5	2	0
Ashford	14	7	0	5	2	0
Gedling	15	4	5	4	2	0
Reigate and Banstead	18	8	4	4	2	0
Eastleigh	15	6	3	4	2	0
Mendip	14	6	2	4	2	0
North Devon	14	6	2	4	2	0
Warwick	15	4	6	3	2	0
Breckland	17	10	2	3	2	0
West Lindsey	11	7	0	2	2	0
East Lindsey	18	6	0	11	1	0
Shropshire	39	23	6	9	1	0
Rushcliffe	15	3	3	8	1	0
Mid Sussex	17	6	4	6	1	0
Mansfield	13	3	3	6	1	0

West Oxfordshire	15	8	0	6	1	0
Rugby	12	3	3	5	1	0
Tunbridge Wells	14	6	2	5	1	0
Boston	8	2	0	5	1	0
Chesterfield	13	3	5	4	1	0
Sevenoaks	15	9	1	4	1	0
South Northamptonshire	11	6	0	4	1	0
Wokingham	20	7	9	3	1	0
Carlisle	13	6	3	3	1	0
Newark and Sherwood	13	7	2	3	1	0
Allerdale	12	8	0	3	1	0
Daventry	10	5	2	2	1	0
East Hampshire	15	11	1	2	1	0
Brentwood	9	6	0	2	1	0
Torridge	9	6	0	2	1	0
Copeland	8	5	0	2	1	0
Epsom and Ewell	9	2	5	1	1	0
Oadby and Wigston	6	1	4	0	1	0
Knowsley	20	1	8	11	0	0
Broadland	18	6	3	9	0	0
North Kesteven	13	3	1	9	0	0
South Holland	11	1	1	9	0	0
Vale of White Horse	14	3	3	8	0	0
Wychavon	19	9	2	8	0	0
South Staffordshire	14	6	0	8	0	0
Wealden	21	11	3	7	0	0
Amber Valley	16	6	3	7	0	0
Bassetlaw	14	4	3	7	0	0
Horsham	16	8	1	7	0	0
West Berkshire	22	12	4	6	0	0
Tonbridge and Malling	13	3	4	6	0	0
South Derbyshire	12	2	4	6	0	0
Fenland	11	1	4	6	0	0
Selby	10	4	0	6	0	0
Newcastle-under-Lyme	16	6	5	5	0	0
North East Derbyshire	13	5	3	5	0	0
Rochford	10	2	3	5	0	0
Stratford-on-Avon	15	8	2	5	0	0
Harborough	10	3	2	5	0	0
East Cambridgeshire	10	4	1	5	0	0
South Norfolk	15	10	0	5	0	0

Chichester	14	9	0	5	0	0
South Hams	12	7	0	5	0	0
Uttlesford	9	4	0	5	0	0
Wyre Forest	14	4	6	4	0	0
Hinckley and Bosworth	14	5	5	4	0	0
Blaby	12	3	5	4	0	0
Herefordshire	23	15	4	4	0	0
Bolsover	10	2	4	4	0	0
Mole Valley	13	9	0	4	0	0
Runnymede	10	3	4	3	0	0
Isle of Wight	18	12	3	3	0	0
Babergh	11	6	2	3	0	0
Ribble Valley	8	3	2	3	0	0
North West Leicestershire	13	9	1	3	0	0
Derbyshire Dales	10	7	0	3	0	0
Melton	6	3	0	3	0	0
Surrey Heath	12	7	3	2	0	0
Mid Devon	11	6	3	2	0	0
Waverley	17	13	2	2	0	0
Winchester	14	10	2	2	0	0
East Northamptonshire	10	6	2	2	0	0
Staffordshire Moorlands	13	10	1	2	0	0
Tandridge	11	8	1	2	0	0
Tewkesbury	9	6	1	2	0	0
North Norfolk	14	12	0	2	0	0
North Warwickshire	7	5	0	2	0	0
Stroud	15	10	4	1	0	0
Hart	11	8	2	1	0	0
Maldon	8	5	2	1	0	0
Cotswold	11	9	1	1	0	0
Hambleton	11	9	1	1	0	0
Craven	8	6	1	1	0	0
Richmondshire	6	4	1	1	0	0
Rutland	5	3	1	1	0	0
Ryedale	6	5	0	1	0	0
Rossendale	8	5	3	0	0	0
Malvern Hills	11	10	1	0	0	0
Eden	7	6	1	0	0	0
Forest of Dean	10	10	0	0	0	0
West Devon	7	7	0	0	0	0

Section 6: Fixing the problem – case studies

We have showcased some case studies of community and civic action on green space from the UK and overseas in recognition of the important role communities have in this agenda, and to underline the importance of cooperation by various parties including ensuring the central role of community groups with knowledge, expertise and enthusiasm.

The Tees Valley, Co. Durham

- **The Tees Heritage Park– the renaissance of the river valley**
  https://www.groundwork.org.uk/wp-content/uploads/2019/09/THP-Natural-England-Case-Study.pdf

The Tees Heritage Park stretches from Yarm to Stockton in the Tees Valley, taking in all of the open land along the River Tees including the Leven Valley and Bassleton Beck. For the first time, this attractive stretch of green space in the heart of Tees Valley now has a clear identity and formal planning designation so that it can be promoted as a single park. Despite being the common thread where communities had thrived, the demise of the river-based economy meant people turned their back on the river and saw it as an unattractive place. Unloved and a dumping ground for rubbish, development was piecemeal with little thought for connectivity or the potential of this important environmental asset to boost recreation, nature and wellbeing.

Formed in 2007, the Friends of Tees Heritage Park conceived Tees Heritage Park to bring about a renaissance of the river valley, celebrate its heritage and provide a unique amenity for today's Tees Valley communities. The park is now identified as a major strategic initiative in the Tees Valley Green Infrastructure Strategy, recognising that the 'corridor concept' fits well with the physical structure of much of the Tees Valley sub-region. It also identifies the River Tees as a strategic wildlife corridor providing a major route through the urban area and into the surrounding countryside, with opportunities to increase accessibility for residents.

Created through a partnership between Friends of Tees Heritage Park, Groundwork North East, Environment Agency, the Canal & River Trust, Natural England, Stockton-on-Tees Borough Council and Tees Valley Wildlife Trust, the park officially opened in September 2012 with the completion of the first phase of the project.

Benefits to date include enhancements to the river corridor improving accessible for nearby communities. Formally defining the park has made it easier to protect areas such as the River Leven corridor for wildlife. Site visits with local schools resulted in pupils producing a large number of sculptures that inspired the on-site artworks. QR (Quick Response) code technology enable visitors to download information about the local wildlife and heritage.

By connecting and promoting the existing green space as a single park, this visionary project has reconnecting local people to the local river they had once turned their back on.

Kings Lynn, Norfolk

- **River Lane Pitches - Effective campaigning through the planning consultation process - Fields in Trust**

River Lane Pitches form part of a large area of open space within the North Lynn area of King's Lynn, Norfolk. The fields are within a ward that has particularly poor health and deprivation demographics and is within one of England's top 25% most deprived wards.

35% of the adult population within the ward are identified as obese, putting the ward in the top 20% of obesity rates nationally. At 73.1 years, average life expectancy is in the bottom 20% of life expectancy across England. Within Kings Lynn the ward has the highest rates of crime and antisocial behaviour and among the highest unemployment rates.

The entire space was originally proposed for a major housing scheme by the borough council in its Local Plan allocations. The River Lane pitches themselves were earmarked for the provision of 153 new houses. A community campaign began during the council's consultation process on its plan and a large number of residents engaged in the consultation, and vehemently objected to the inclusion of the River Lane pitches.

As a result of the successful campaign, the council agreed to remove them from the proposal and the tenacity of the residents' association led the council to agree to legally protecting the land under Fields in Trust's UK-wide Active Spaces project, which has protected 50 green spaces across the UK whilst supporting the most inactive members of the community to get out and use their local parks.

The River Lane Sports Pitches project recruited local women who faced barriers to participation. Many young mothers lacked necessary support to take-up physical activity, so the project introduced 'buggy bootcamp' and family fitness sessions on River Lane Pitches - with children in tow. This was complemented with a Couch to 5k scheme - in total, 62 women completed the programme with many running their first 5k. River Lane Pitches will now always be available for the Kings Lynn Community to enjoy for both formal sport, and informal recreation, forever.

This case study was first published in 'Watch This Space" the Fields in Trust handbook for communities to champion and support their local green spaces with an easy-to-use guide to the planning system. Available at www.fieldsintrust.org/watch-this-space

- **Future Proof Parks – getting young people involved in their green space heritage**
  https://www.groundwork.org.uk/projects/future-proof-parks/

Groundwork has partnered with Fields in Trust and National Youth Agency to deliver 'Future Proof Parks', a National Lottery Heritage Fund programme – part of the £10m 'Kick the Dust' initiative – that aims to get more young people interested and involved in preserving their local park and greenspace heritage.

Over the course of the three-year programme, which started in 2018, 880 young people across the UK in the West Midlands, East of England, West of England, North West and North East, will learn more about their local historic park heritage with the overall aim that at

least 180 young people will join their local 'friends of' park groups and volunteer to preserve the local spaces that matter to the communities they live in.

The project will also work with 60 'friends of' park groups to give them the tools, encouragement, and support to get more local young people involved in their work and to see the benefits of cross-generational working. The programme also aims to create crowdfunding campaigns to help raise money for the local parks and to test new ways of generating income as well as engaging the local community.

Future Proof Parks focuses on historic parks and heritage landscapes in five 'hub' locations across England. In each hub young people will be supported to give their time and talents to support local groups and heritage organisations:

East: Hertfordshire, Luton and Essex
North East: South Tyneside, South Shields, Gateshead, Sunderland and Durham
North West: Blackpool, Liverpool, Wigan and Lancashire
West: Bristol and South Gloucestershire
West Midlands: Smethwick, West Bromwich, Oldbury, Stourbridge, Dudley and Tipton

Paris, **France**

- **Cours Oasis - Transforming a school playground into an oasis**
  http://www.meteofrance.fr/actualites/83487673-projet-cours-oasis-transformer-des-cours-d-ecole-en-ilots-de-fraicheur-et-espaces-urbains-de-proximite

Paris has found an innovative way to use existing space creatively to improve the urban environment and provide breathing space in the middle of city streets.

France is facing more frequent and more intense heatwaves and as part of its resilience strategy, and with the support of the EU's Urban Innovative Actions programme, Paris is piloting the transformation of ten school playgrounds into communal spaces that are greener, cooler and more pleasant places, as a retreat from rising summer temperatures.

The goal of Cours Oasis is to invent a model for the schoolyards in the future, co-designed with the schools – teachers, students, parents and other local stakeholders. The 3 year project from 2019-2021 provides ways for local people to participate in an innovative climate change project with the potential to be involved in future planning to transform schoolyards into communal spaces.

The idea is to create spaces for locals to share, especially in the evening or during school holidays, with a mix of inventive play areas, quiet corners, water features, increased vegetation and garden-based learning.

The project is collaborative from start to finish; children are involved in designing the play areas and the oasis is created after consultation with the locals to meet their needs and expectations.

Project delivery partner, Paris Councils for Architecture, Urbanism and Environment, help deliver the co-design phase through workshops, training, community mobilisation and assessment.

The pilot project with ten schools will provide the opportunity to experiment, trying out new technical solutions for construction materials, for urban furniture, for plant varieties, and for neighbourhood engagement and participative democracy. All will provide useful learnings with potential to create scalable and durable approaches to opening-up school playgrounds as green lungs in the heart of the city.

Note that the opening of the school yards has been postponed due to the Covid-19 outbreaks and some of the citizen assembles suspended.

Hackney, London

- **10xGreener – the postcode gardener**
  https://experiments.friendsoftheearth.uk/projects/postcode-gardeners-how-hiring-postcode-gardener-can-bring-nature-back-your-street

Many urban areas are deprived of green space and many city dwellers lack gardens, or the skills to make them thrive. Residents do want greener and healthier streets, but mini projects can founder because it can be hard to maintain new planting.

Early in 2018, Friends of the Earth brought together residents in Daubeny Road, E5 in London to explore how they could make their street *10xGreener*. This yielded the insight that there is a real appetite to meet and join in action with neighbours, but that residents lacked the time or capacity to keep up the good work.

Friends of the Earth then ran a pilot bringing people together to increase and maintain the vegetation and wildlife in the London E5 postcode area, whilst building a more connected community through gardening.

Crowdfunding raised over £6,500 to hire the UK's first postcode gardener and paid for 350 hours of her time to tackle maintenance and organise local residents in transforming the area. Kate Poland worked at 'postcode level' supported by EcoActive, a delivery partner and a group of passionate volunteers to co-create a vision of how the streets could be greened. This was not about helping people nurture their own gardens; it was about planting in public spaces and on-street yards, walls, windowsills, balconies that are publicly visible.

Using her own knowledge and skills and resources especially created for the project, Kate brought people together, ran workshops, sowed seeds, planted in the margins and smashed up concrete to make space for nature. The initiative was very child-friendly and the group was strongly supported by the local primary school, where progress could be celebrated, and plans and ideas shared. Residents continue to support the initiative and fundraise to retain the postcode gardener.

Friends of the Earth then ran a competition with Crowdfunder to kickstart more postcode gardeners. Over 100 entries were received from across the country. The winner from

Bideford, North Devon, raised funds in November 2018 to hire their postcode gardener in 2019. Many useful learnings have come from this pilot and Friends of the Earth is delighted that it creates the beginnings of a replicable model for different kinds of urban centres.

Tottenham, London

- **Lordship Rec - Rescuing and transforming a public park**
  www.parkscommunity.org.uk https://lordshiprec.org.uk/works/

When park users launched the Friends of Lordship Rec in 2001, Tottenham's largest public park was run-down, unstaffed and almost abandoned. The Parks Service of cash-strapped Haringey Council was reduced to the bare bones of grass cutting and litter collection, the buildings were semi-derelict, and anti-social behaviour was rife. Local people rarely ventured in, including those on the neighbouring council estates, Tower Gardens and Broadwater Farm, despite residents having little or no garden space.

Over the past two decades as a result of determined community action, committed community/council partnership-working and substantial funding, the park has been transformed into a vibrant and beautiful multi-functional space for everyone to use, enjoy and benefit from.

Following years of effort, public consultation and collaboration, backed by massive and vocal support from local people, the park underwent a renaissance in 2012 with funding of £7 million from the Lottery, Haringey Council and other sources.

The park now has a new community-run Hub with café and toilets; a new staffed depot; existing buildings and facilities have been restored and a long-term commitment has been made to staffing and maintenance. Nature has been supported by turning a culverted river into a flower-laden meandering channel and more trees, meadows and flower beds have been planted. Bikers have not been forgotten with a new bmx loop track.

A powerful element of the ongoing programme is that community empowerment, enshrined in the park's management plan, has been built into all decision-making. The Friends and user groups manage or part-manage various areas and facilities and co-manage the park as a whole with the Council's Parks Service.

Park usage has tripled. The Friends now have 1400 members, and there are now almost 20 different park user groups promoting cycling, sports and fitness, wildlife, managing the buildings, organising all kinds of events and involving all sections of the community.

This success story in a diverse, predominantly working class area has been a trailblazer and a beacon for what can be replicated across the UK. The Friends host a project promoting community empowerment in green spaces throughout the UK.

Rotterdam, The Netherlands

- ***Rotterdam, sterker door* – Rotterdam onwards, stronger**
  https://dutchreview.com/cities/rotterdam-drops-233-million-on-green-spaces-and-they-look-incredible/

Whilst many small local initiatives can make a neighbourhood greener and more attractive, an ambitious city-wide plan can deliver enormous benefits to many more people and can radically change the image of a city for its citizens and visitors alike.

As an important port, Rotterdam was bombed more extensively than any other Dutch city in WWII and in the scramble to rebuild, its concrete developments have led to it being described as the 'ugliest city in the Netherlands. That is about to change.

Rotterdam has invested 233 million Euros in seven different green city projects, aiming to be complete within a decade. The aim is to counter the negative effects of coronavirus and enhance the quality and appeal of the city, focussing on adding green space to the urban environment. The changes will add that breath of fresh air that Rotterdam has seemed to lack and artists' illustrations portray fountains, trees, greenery, parks and more space for pedestrians and cyclists.

Innovative changes include the transformation of the roof of a railway viaduct, de Hofbogen, into a 2-km long walkway in the heart of the city which includes a circular waterway to contribute to the city's solutions to climate change.

The new 7-hectare Park Maashaven down by the harbour provides much needed green space and an area for festivals and events, whilst the iconic Hofplein will be revamped with more trees and grass and the new Blaak park, combined with a decrease in traffic, will create cleaner air and less noise pollution. The new plans also include a more climate-friendly energy transition.

When complete these transformations will add another aspect to the city's existing urban vibe with spaces for people to breathe more freely, walk, cycle and hang out, designed with post-corona in mind and the enhanced desire for access to green space that lockdowns have created. See the website above for illustrations.

Oldham, Greater Manchester

- **LoveWhereYouLive - how a solution to fly-tipping helped create safe friendly spaces for residents - Hubbub**
  https://www.hubbub.org.uk/Blogs/neighbourhoods-blog/can-community-action-cut-fly-tipping
  https://www.hubbub.org.uk/lovewhereyoulive

Greening the city does not depend on creating dedicated spaces. It can also mean recognising that there can be enormous potential in the overlooked and unloved places in the neighbourhood which can be transformed by a creative solution to a different problem.

Councils have to spend millions of pounds in cleaning up urban fly-tipping and littering, whilst residents suffer the eyesores and sense of neglect that heaps of rubbish create. In Oldham, some back alleys running between the Victorian redbrick terraced houses were neglected, unattractive and unsafe rubbish-strewn waste grounds. No-one was taking responsibility for cleaning up. Hubbub wanted to understand the causes of fly-tipping and to find solutions by working with residents to transform 5 of these fly-tipped alleys into bright and friendly communal spaces.

Key to this transformation was winning the trust of residents and finding powerfully motivated women who wanted their neighbourhood to improve. Either because they wanted safe places for kids to play or a concern that the area was 'going downhill'. Hubbub worked with local councillors, community support teams and local police to identify small bands of residents whose concern could be channelled to turn the fly-tipped alleys into safe, usable spaces.

In the areas where community action worked, the women leading the activities were able to earn the respect of neighbours and be a mutually supportive group with a clear idea of what they wanted. A range of activities proved to be successful in building pride of place, including community events, skills training and bright vibrant messaging. Hubbub turned these into an inspiration guide for others who want to transform shared spaces.

Three successful alleyway transformations with residents reported a 100% decrease in fly-tipping. What had started as a fly-tipping campaign helped build a sense of community, "transformed an environment that brought us continued frustration and despair into one that brings us joy and hope", and helped people feel safer as they came to know their neighbours and their children used safe play areas.

However, the learnings from this project is that it is a slow, expensive and intensive process and requires ongoing commitment from partners and residents. Fly-tipping can be a sign of disconnected communities and can only be addressed by building trust and interaction between neighbours. It is not a quick fix.

Ghent, Belgium

- **The Red Carpet - new child-friendly route through an urban renewal area**
  https://rethinkingchildhood.com/2018/04/03/ghent-serious-child-friendly-urban-planning/

Ghent city authorities faced a challenge when planning the regeneration of Brugsepoort, one of the city's poorest neighbourhoods, where open public and green space is scarce and of very low quality. The 19th century ring accounts for 4% of Ghent's land surface but 25% of its population in a very dense urban fabric.

The plan became an urban renewal project, *Oxygen for the Brugespoort,* to create extra open public space in the dense neighbourhood, to improve the housing stock and to help foster cohesion in an economically disadvantaged area.

A strategic element is *The Red Carpet*, a 2km traffic-calmed linear route through Brugespoort, linking neighbourhood children's facilities including a school, a kindergarten and several public spaces. The project involved extensive traffic calming (with distinctive red stones laid out in a herringbone pattern), a new traffic-free bridge, a new multi-purpose public space including informal sports facilities and a new 24/7 pedestrian walkway running right through Pierkespark, a historic building.

Elisabeth Belpaire who worked on the project draws several lessons from her experience:

- The spatial/physical re-structuring of the neighbourhood takes long-term planning and commitment such as buying up strategically located properties over time that can

be turned into new public and green space - literally adding 'oxygen' to the neighbourhood.

- The 'Red Carpet' has become the 'soft spine' of the area, an axis connecting existing and new local services such as a library, kindergarten, and public spaces such as the newly created squares and parks. Increasing the connectivity between the Brugsepoort and other neighbourhoods was also important for increasing 'walkability'. It also meant strengthening connections with other neighbourhoods through 'bridges', literally and figurative. And with city-level networks for pedestrians and cyclists.
- You need both political leadership and intense collaboration with grassroots organisations and youth representatives, through the establishment of a local coalition to achieve a high level of citizen participation. Both are key for the creation of a new identity and a 'new memory' for the neighbourhood. Whilst it is essential to keep people in the neighbourhood and avoid gentrification it is a delicate balancing act to support the original communities as well as fostering economic growth and social mix.

Ghent has also taken forward some major new green spaces, with four destination 'green poles' either in place or on the way. Schoolyards are being refurbished in naturalistic ways. More than half of schools now have a green schoolyard, in a move inspired by a study visit to Berlin. Ghent is keen to rethink streets, with 140+ play streets alongside school streets (which are closed to traffic at certain times of the school day) and some of the region's first 'bike street' (fiets straat) projects, where bicycles have priority over cars.

Inverclyde, Scotland

- **Green Gym, The Conservation Volunteers (TCV)**

Inverclyde has the highest local share of all councils in Scotland of 5%, 10% and 20% most deprived data zones, and the second highest local share of all councils of areas in the 15% most deprived data zones. [xxviii]

A green space audit identified a number of underperforming green spaces. Working with Inverclyde Council and Glasgow & Clyde Valley Green Network Partnership, TCV identified priority sites where environmental and accessibility improvements would be most beneficial and sites near communities with the greatest need.

TCV established a new Green Gym group and ran a 12 week Branching Out programme at Coves Reservoir Local Nature Reserve, working with a number of local partner organisations, including Scottish Association for Mental Health and Belville Community Garden Trust, to undertake green space improvements.

Woodland was managed and volunteers were trained in woodland maintenance techniques. Biodiversity was improved with the planting over 350 trees and increasing the variety of wildflower species. Accessibility was improved by widening and clearing paths, improving drainage, and clearing and repairing steps.

Green Gym volunteers reported higher levels of physical activity and scored higher on the Short Warwick-Edinburgh mental wellbeing scale after taking part. Feedback included:

"Anxiety stops me from sleeping most nights but after the Green Gym I sleep really well."
"I used to just go to the Green Gym but now I go walking and to the gym sometimes as well."
"The Green Gym is very important for my physical and mental health as it's the only time in the week that I get out of the house."

A self-sustaining group of volunteers arose from this project and the *Friends of Coves Nature Reserve* are now a volunteer-led constituted group, running weekly land management sessions and monthly community litter picks.

Leicestershire

- **Green Gym, The Conservation Volunteers (TCV)**

Rolleston Green Gym was established in the grounds of Rolleston Primary School in June 2019 to provide intergenerational activities including food growing and wildlife improvement on local green spaces.

The Green Gym enjoys strong support from local communities including Eyres Monsell, which is in the first quintile of the 2015 Index of Multiple Deprivation among Leicester City communities, Harborough District Council, and Saffron Health Practice, which hosts regular giveaways of spare plants and promotes the project to patients.

David, a local single parent, discovered the Green Gym through his son, who is a regular attendee. David had faced many challenges in life, affecting his health and wellbeing, including feeling isolated from his community, and was looking for new opportunities to connect with other people. He developed strong practical, creative, leadership and organisational skills and, one year on, is undertaking further training to gain the skills to become a TCV Volunteer Officer and support the Green Gym to become independent and self-sustaining. As David says:

"*I have made new friends and learned to deal with people that I would not usually get on with. It is nice to feel comfortable in a group*"

In October 2019, David and his son were presented with an Eyres Monsell Volunteer Award by Councillor Karen Pickering, to recognise his contribution to Rolleston Green Gym. David has since expanded his voluntary activity, volunteering regularly at South Wigston food bank and becoming a key member of the Eyres Monsell Action Group. In 2020, he signed up as an NHS Volunteer Responder, where he delivers medication to people who are vulnerable and shielding.

Adur & Worthing, West Sussex

- **Growing Communities, The Conservation Volunteers (TCV)**

In September 2015, 25 local green space and 'Friends of…' groups were identified as working largely in isolation from each other in Adur & Worthing. A consultation exercise with these groups, the local councils and other local partners identified a need for mutual support and the potential for joint working.

TCV and Adur & Worthing Councils facilitated regular monthly meetings during which the groups shared their achievements and plans for the future. This provided a better understanding of groups' capabilities and needs and enabled TCV and Adur & Worthing Councils to work with groups to design extra support. A green space partnership, *Green Tides*, was developed and supported and became independently constituted in 2017.

In 2018, *Green Tides* secured around £10,000 from Awards for All to fund marketing materials, including a professionally designed website, and training which included emergency first aid, chainsaw and strimmer use, and "Train the Trainer".

The Growing Communities programme, delivered by TCV in partnership with Adur & Worthing Councils, has supported *Green Tides* to develop new local partnerships, expand membership to 40+ groups, and develop the resilience and sustainability of *Green Tides*.

Feedback from *Green Tides* includes:

> "*Support with funding applications has meant that funding has been obtained quickly and in a timely manner to grow and develop Green Tides e.g. the website, branding, raised social media profile and insurance for groups."*
> "*Support with recruiting new committee [members] recently has increased capacity of the committee."*
> "*Doing events jointly with Growing Communities has made going to events achievable and Green Tides has been able to attend more events and raise their profile in the community through this."*

East London

- **Lea Marshes, East London**
  https://sustainablehackney.org.uk/profile/SaveLeaMarshes https://www.saveleamarshes.org.uk/2019/09/26/help-make-lea-bridge-waterworks-a-wild-haven/

Save Lea Marshes began as the campaign to 'Save Leyton Marsh' and in 2013 expanded its remit to protect Leyton, Hackney and Walthamstow Marshes as open green spaces for future generations, regardless of income.

The vision for the Waterworks in East London involves re-connecting, restoring and rewilding much of historic Leyton Marshes for the benefit of people and wildlife. Part of the site is already a designated nature reserve, with the former Thames Water Depot on one side and the Waterworks Meadow on the other.

The campaign is crowdfunding for ecological surveys of the Waterworks Meadow to protect it from inappropriate commercial exploitation, such as the large- scale music festival which was prevented through a vocal community campaign in 2020.

Ecological data collected will be used to persuade the Lee Valley Regional Park Authority to protect and enhance the habitat rather than use it as an events venue – rewilding the meadow for the benefit of wildlife and encouraging back endangered birds, reptiles, insects and plants. The site, a former golf course, has already begun to naturally regenerate, red-listed birds and other threatened species have been recorded there.

The campaign is also working with other community groups and CPRE London to protect the neighbouring Thames Water site from development so that it can be opened up to public access and re-imagined as the East London Waterworks Park; a place for wild swimming and community horticulture, with the vital habitat along the river connecting up with the Middlesex Filter Beds Nature Reserve, while other parts of the site will be left to naturally regenerate for wildlife.

The Waterworks Meadow and East London Waterworks Park will provide people with low-cost opportunities to improve their physical health by promoting walking, horticulture and wild swimming. Reconnecting these areas will enable people to roam freely throughout the Lower Lea Valley following long-distance walking routes.

This new vision for the historic Waterworks will create and increase biodiversity, support climate resilience, improve health outcomes and strengthen people's access and connection with nature – all vital for the coming ecological challenges ahead.

> "*We're really excited about our vision for the Waterworks. In times of ecological emergency this rewilding project could not only improve biodiversity but create opportunities for people to better connect with nature whilst at the same time enhancing climate resilience going into the future*." Caroline Day, organizer.

Community action to save green spaces

There is no shortage of examples of grassroots community groups campaigning in various ways to protect green space, increase the quantity and the quality of green space for public amenity and for nature. This section provides just a handful of recent examples of spaces large and small being stood up for by communities especially those supported by the Open Spaces Society (OSS).

Across England, countless communities – too many to mention – are having to defend local green spaces which are either being actively targeted for development, whether for relatively small-scale changes in land use or for major new development, housing and infrastructure schemes, or are at risk of neglect and falling into abeyance from loss of funding, neglect, lack of oversight or a combination of these and other factors.

The cases have often involved challenging local council bureaucracy, standing up to developers who have the influence and access to decision makers, and the deep pockets to fight for their proposals over time, and knowing how to use the planning and legal system, often with support from organisations such as the OSS.

Whitehall Road Field in Blackburn, Lancashire: The Whitehall Road Neighbourhood Group has secured local green space as an Asset of Community Value (ACV) approved by Blackburn with Darwen Borough Council www.oss.org.uk/blackburn-group-win-support-of-borough-council-for-new-asset-of-community-value/

Freeman's Wood in Lancaster, Lancashire: Friends of Freeman's Wood successfully persuaded Lancashire County Council to register Freeman's Wood as a town green (TGV).

Freeman's Wood is a nine-hectare open field surrounded by woodland beside the Lune industrial estate on the west side of Lancaster. Originally a waste tip for the former linoleum factory, since the 1960s the wood has been used for informal recreation.

The Friends of Freeman's Wood applied for TGV status when the land was partially fenced in 2012. Lancashire County Council eventually heard the case at a public inquiry in 2019. The Council endorsed the recommendation of the inquiry inspector, barrister Alan Evans, and agreed to register the land.

Meanwhile, Satnam Investments Ltd is acting on behalf of the landowner and has applied for planning permission for 250 houses on the land. www.oss.org.uk/lancaster-green-space-saved-for-the-community/

Leigh Common, Colehill, Wimborne, Dorset: Leigh Common is a nine-hectare woodland and grassland nature reserve in Colehill, near Wimborne—the first common land in Dorset to be registered in 1967 and given permanent protection.

In 2016 developers Gleeson Developments Ltd applied to Dorset Council to deregister about 1.3 hectares, or one-seventh of the common either side of Leigh Road. Lewis Wyatt (Construction) Ltd then applied in 2017 to deregister part of the same land. The developers applied under section 19 of the Commons Act 2006, on the grounds that a mistake had been made by the commons registration authority.

Both developers at that time had interests in building on land to the south of Leigh Road, and had permission from the Secretary of State for road works on the common to enable access to their development sites.

In December 2018, Dorset Council granted the applications relating to most of the land south of Leigh Road, agreeing with the developers that it must have made a mistake in 1967 in provisionally registering the land under the Commons Registration Act 1965. It agreed with the developers that the land at that time was part of the highway comprised in Leigh Road, and should not have been registered. It ignored the Open Spaces Society's case that there had been no mistake originally. The Society challenge the decisions and, following receipt of the pre-action protocol letter, Dorset Council agreed that its decisions were wrong, and that they should be quashed.

Neither Gleeson nor Lewis Wyatt objected, but BDW Trading Ltd (part of Barratt Developments plc), which had purchased Gleeson's interest in adjoining land, refused to agree to the decisions being quashed. The Society was obliged to seek a judicial review.

Leigh Common is now protected because the Open Spaces Society steadfast challenge that it was correct that the land was registered as common land, even though it might also be part of the highway, and the court order supports that view.

Many other commons in England are partly or wholly highway land, and had BDW's view prevailed, it could have led to local authorities deregistering land all over the country, opening them up to development.

www.oss.org.uk/leigh-common-saved-from-development/

Amenity Green, Bovingdon, Hertfordshire: 140 square metres of roadside verge or 'amenity green' in the village of Bovingdon, near Hemel Hempstead, was targeted by Dacorum Borough Council for six, surfaced, car-parking bays, near the junction of High Street and New Hall Close. The proposal on common land meant the Council required the Environment Secretary's consent under section 38 of the Commons Act 2006.

The Open Spaces Society said that the use of the common for car-parking was inconsistent with the public's enjoyment of the common as parking bays would reduce the area available for public recreation, and they would have an urbanising effect.

Rejecting the application, the planning inspector said that "parked vehicles will seriously interfere with public rights of access over the common and will also interfere with the land's apparently established use at Easter and Christmas for religious displays and events… the proposals will unacceptably harm the interests of the neighbourhood and rights of public access over the land".

The inspector added that provision of parking bays was not consistent with government policy that works should take place only where they maintain or improve the condition of the common and that any wider benefit from the parking provision was "outweighed by the harm the works will cause to the appearance of the common and how it is used".
www.oss.org.uk/we-help-to-save-part-of-hertfordshire-common/

Yateley Common in Hampshire: Yateley Common is threatened by proposed expansion of Blackbushe Airport
www.oss.org.uk/blackbushe-airport-ruling-could-put-many-commons-under-threat/ and
www.oss.org.uk/the-meaning-of-curtilage/

Section 7: Conclusions and recommendations

Conclusions

The consensus is clear: people need quality green spaces and parks and want more routine contact with vibrant nature. Access to quality green space nearby underpins health and other aims and brings considerable financial savings.

Improving access to rural landscapes should be in addition to people having quality green space on their doorstep for the rest of the time when they cannot readily visit a National Park or Area of Outstanding Natural Beauty.

The lack of green space in large numbers of neighbourhoods across England is clearly a significant problem. It is a problem for mental and physical health. It is a problem for climate adaptation. And it is a problem for biodiversity. It is a problem for sound use of public funds.

Both the quantity and the quality of accessible green space matter, but there is a paucity of data to enable an England-wide analysis.

The lack of quality green space is also an issue disproportionately affecting people from black, Asian and minority ethnic populations. If you are a BAME person you are more than twice as likely as a white person to live within the areas most deprived for green space (rated E).

That finding is particularly pertinent given the disproportionate effect of Covid-19 on people of BAME backgrounds, and the imperatives of Black Lives Matter.

The decline in funding for councils has negatively impacted on the green space agenda over several decades and especially in the most recent. But not all councils can wash their hands of the problem and blame central government funding alone. Some councils have allowed the loss of valuable green space in areas of paucity.

The effort of Fields in Trust, the Open Spaces Society and many others, such as the 6,000+ parks friends' groups, in highlighting these issues and battling to save valued spaces needs to be applauded and taken seriously.

Central and local government, professions and communities can all now be part of reversing the decline of nature and green spaces and making 'nearby nature' and space for health and well-being a reality.

The knowledge and the means also exist to weave sustained support for green spaces into existing strategies to boost public health, learning, skills and formal education alongside action to reduce climate changing emissions, and to restore England's deteriorating wildlife and natural habitats and people's lack of contact with nature.

Lasting commitment will be needed, including through quality land use planning and proper funding for the long term alongside novel forms of finance to provide the skilled services that are needed to properly plan, use and care for parks and green spaces to maximise their role and prevent their decline.

The unique multi-purpose role and 'natural health service' benefits provided by decent access to quality green spaces and parks have been described as a 'triple win' for improved health, reduced heath inequalities and improved environmental conditions. As stated by the

University of Exeter's study, "Where these multiple benefits are fully appreciated and evaluated, the costs are more likely to be justifiable." [133]

Recommendations

Now is the time to invest in the quantity and quality of England's green (and blue) spaces, parks, green corridors and neighbourhoods. Our policy recommendations chime with many others who have examined these issues for some time, including backers of the *Parks Charter* [134], which is endorsed by 24 national organisations and over 170 regional and local organisations. [135]

The undoubted value and importance of access to quality parks and green and blue spaces means that to level up access to quality green spaces and parks across England **the government should**:

1. **Protect existing space forever**

There should be a legal requirement to protect and enhance the quality of all existing public green space for people and nature, plus a requirement for quality green space in new developments. A revised National Planning Policy Framework could include these requirements. Existing green space can be protected through covenants, and mechanisms such as Fields in Trust's *Green Spaces for Good* programme. [136]

2. **Create new green spaces**

Creation of new green spaces is particularly needed in areas where the quantity is low (i.e. rating D and E) and access is poor (i.e. when it is more than 5 minutes' walk for most people).

The idea that there is a lack of available space for new provision in some urban areas is laughable when the quantity of space given over to cars is considered, particularly given the levels of car ownership in the most green space disadvantaged communities is low.

Closing some streets permanently and turning them into play areas with green infrastructure is a natural next step from the advent of Play Streets.

Local authorities can also secure or negotiate access for the public to green space which is currently limited or closed to access (for example, school playing fields out of school hours, golf courses).

3. **Improve the land use planning system for green spaces and nature**

The current land use planning system in England needs to be improved to provide proper green spaces for people and nature. Planning reform must ensure that existing parks and green spaces are retained and require quality green space in new development as standard, not as an afterthought. Green spaces and parks should be treated as part of the wider realm, not as isolated oases, to meet the green space needs this report identifies.

Local Plan and Supplementary Planning Documents should support the protection and enhancement of green spaces and identify the location for the creation of new spaces consistent with the retention and creation of ecologically coherent nature networks and green infrastructure strategies

Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies should also address green space provision, access and use.

4. **Invest in green spaces to level up the benefits**

The long-term decline in parks and green space funding should be ended with ongoing finance commitments of £4-5 bn a year to 2024. Funding should then be allowed to level off at steady levels to ensure that quality and quantity standards once established are maintained, and that the risks of stop-start investment are avoided.

We note that the recommendations from the National Trust, Sustrans, Create Streets and the Heritage Lottery Fund (HLF) and others including the Mayors of the west Midlands, Andy Street, and Bristol's Marvin Rees that the government should invest £5.5 billion to boost public access to green spaces, especially in areas lacking proper provision.[137]

The grouping assessed that these activities would result in some £200 billion in health and social benefits, in keeping with the substantial evidence highlighted in this and other report on the advantages of routine contact with nature, green and open spaces whether for recreation and exercise, leisure and learning, or more.

5. **Factor in cost savings and benefits**

The many and varied financial cost savings and benefits should be factored fully into policies and decisions about land use, the design and layout of development, and ongoing use and aftercare.

6. **Ensure both quality and quantity**

The multi-functional role of green spaces and parks should be factored into aims and strategies for: health and wellbeing, fitness and physical activity; skills and both informal learning and formal education; restoring nature, storing carbon and addressing stressors such as excessive heat; and, community engagement and outreach, including action to overcome loneliness.

These issues map on to government departments making green spaces and parks a pan-Whitehall responsibility involving at least, nine departments of state:

Business, Energy and Industrial Strategy (BEIS)
Culture, Media and Sport (DCMS)
Education (DoE)
Environment and Rural Affairs (Defra)
Health and Social Care (DHSC)
Housing, Communities and Local Government (HMCLG)
Transport (DfT)
HM Treasury (HMT)
Work and Pensions (DWP)

7. **Explore new forms of funding**

Allocating proportions of the cost savings provided to society by the functioning of quality green spaces such as urban cooling, flood prevention and carbon storage, and from social

prescribing budgets in support of active use of parks and green space for better health and less pressure on health and social welfare services and budgets.

Since 2012, Nesta's Rethinking Parks work has also been exploring news ways to finance and manage public parks.[138]

We also note that the Social Market Foundation has also reflected on C-19 and the funding squeeze and has suggested ways to secure funding for parks. [139]

8. Making parks and green space a statutory service

Ending the situation where local councils have run and managed parks and open spaces, but not as a statutory requirement.

9. Ensure green space is developed with and for people of all cultures

Residents and users' voices must be heard in the management of green space to ensure it is an inclusive environment (for example, some communities may want areas where Muslim women can meet away from men). Community involvement in the practical management of green space (e.g. planting and nature conservation) should also be encouraged and resourced, including through approaches such as social prescribing.

A wealth of expertise also resides in communities on nature conservation, children's play, outdoor learning and education, and these and other resources can be better used by local authorities and others as part of the approach to skills, learning and better use and management of spaces for people and nature.

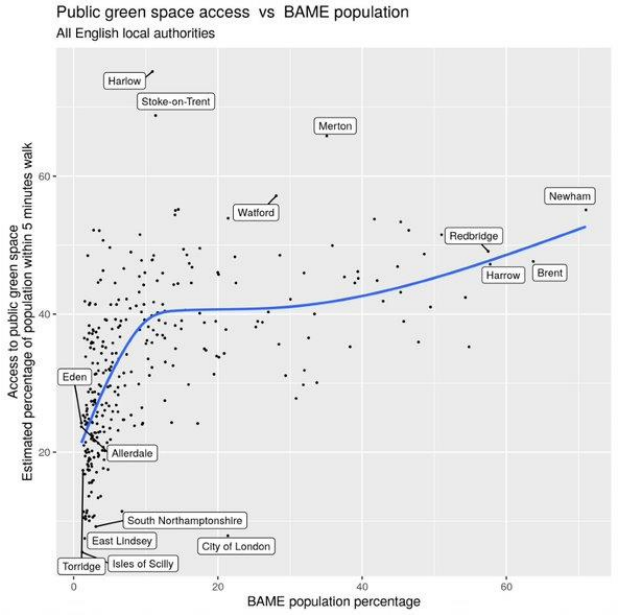
10. Make green spaces hubs for learning and skills

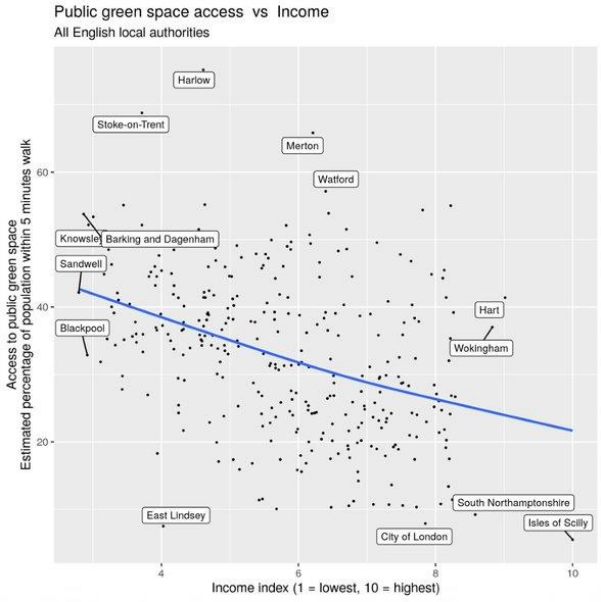
Green spaces, parks and nature areas can and should be places where people can acquire new skills, knowledge and confidence both through informal outdoor learning and formal skills and education strategies.

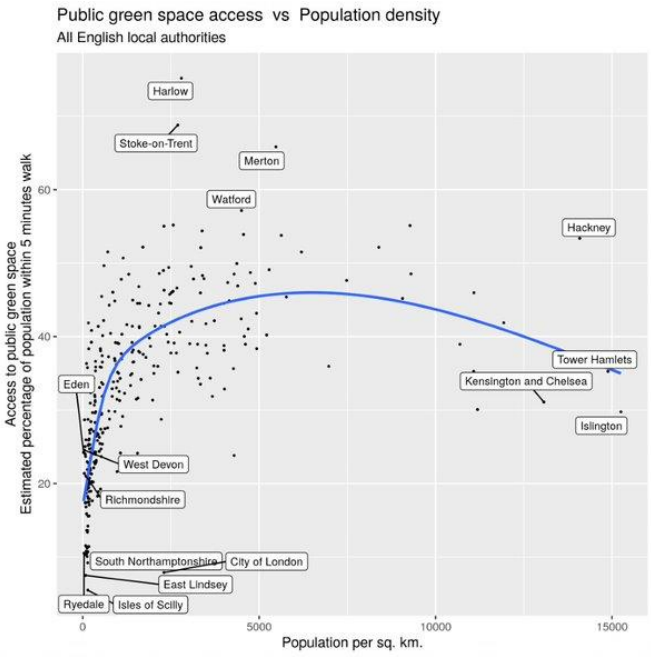
Appendix 1 - Scoring approach

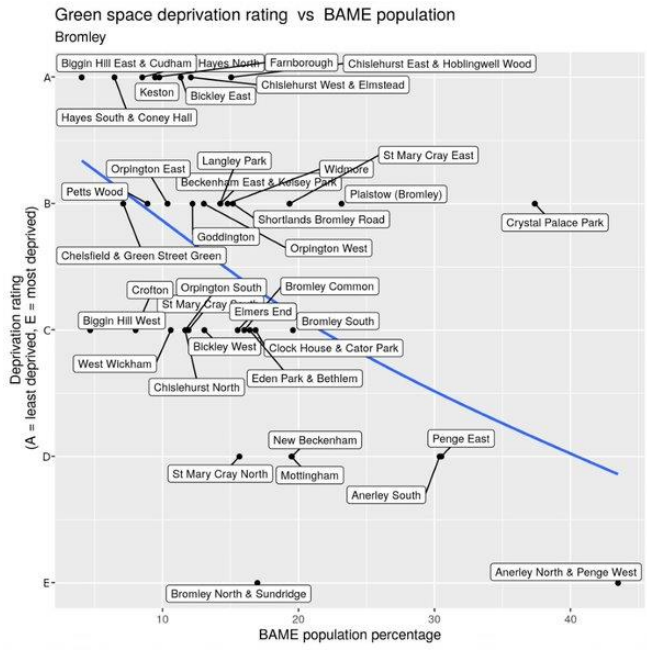
Categories	Total green space	Access	Gardens
RATING E (Least green space)			
Very small gardens and very small amount of public green space	1	1 to 4	1
Very small gardens and small amount of public green space more than 5 minutes' walk for 75% or more of residents	2	1	1
RATING D			
Small gardens with very small amounts of green space more than 5 minutes' walk away for 75% or more of residents	1	1	2
Very small garden and large or very large amounts of green space within 5 minutes' walk, although more than 5 minutes' walk away for 75% or more of residents	3 to 4	1	1
Very small garden with small amount of green space less than 5 minutes' walk for up to 75% of residents	2	2 to 4	1
Small garden with very small amounts of public space less than 5 minutes' walk for up to 75% of residents	1	2 to 4	2
Small garden with small amount of public green space more than 5 minutes' walk for 75% or more of residents	2	1	2
RATING C			
Small garden and large or very large amounts of public green space more than 5 minutes' walk for 75% or more of residents	3 or 4	1	2
Small garden and small amounts of green space less than 5 minutes' walk for up to 75% of residents	2	2 to 4	2
Large or very large garden and very small or small amount of public green space more than 5 minutes' walk for 75% or more of residents	1 or 2	1	3 or 4
RATING B			
Very small or small garden but large or very large amounts of public green space less than 5 minutes' walk for up to 75% of residents	3 or 4	2 or more	1 or 2
Large gardens and a small amount of public green space less than 5 minutes' walk for up to 75% of residents	1 or 2	2 or more	3 or 4
RATING A (Most green space)			
Large or very large gardens and large or very large amounts of public green space	3 or 4	1 or more	3 or 4

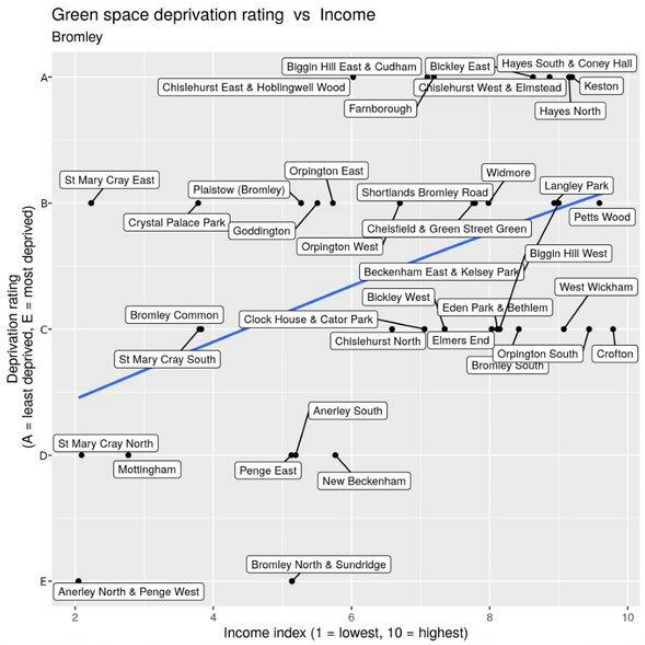
Appendix 2 – Further graphs (with example of local authority specific graphs)

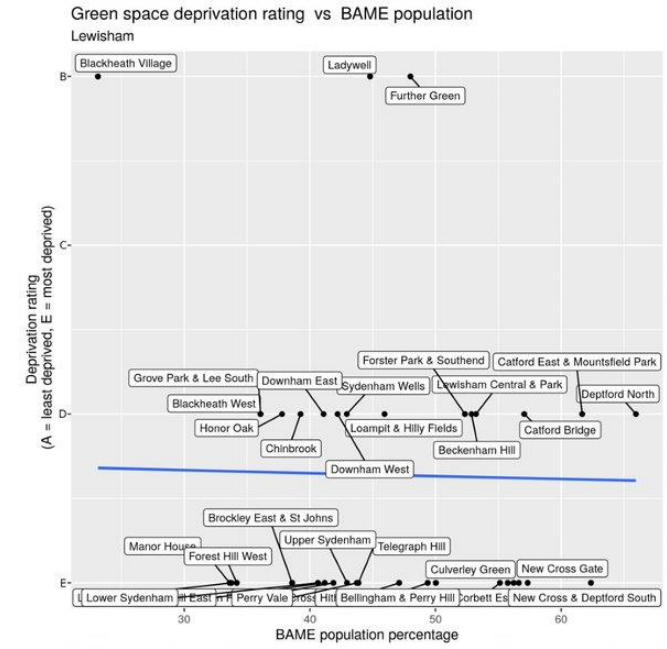


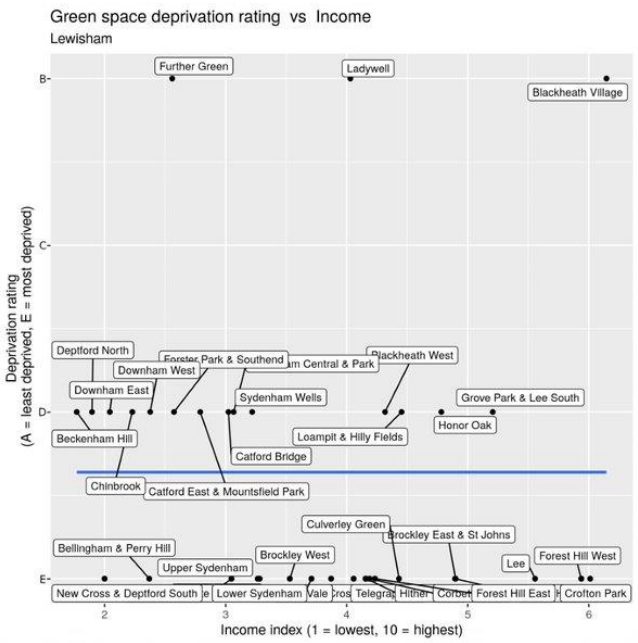


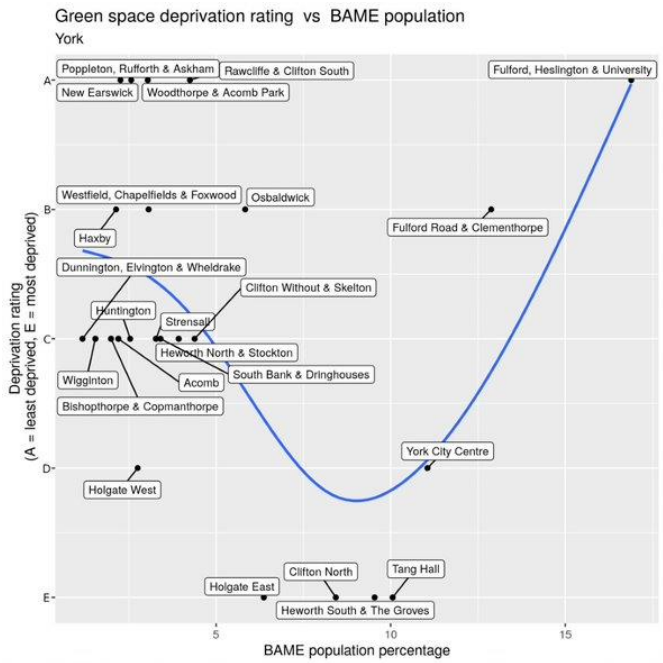


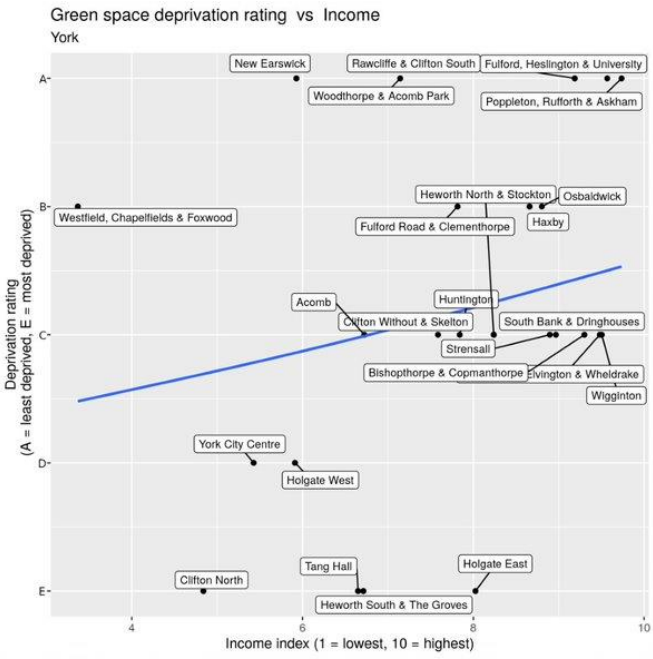

Green space deprivation rating vs BAME population
Bromley
Deprivation rating
(A = least deprived, E = most deprived)
BAME population percentage
Biggin Hill East & Cudham
Hayes North
Farnborough
Chislehurst East & Hoblingwell Wood
Keston
Chislehurst West & Elmstead
Bickley East
Hayes South & Coney Hall
Orpington East
Langley Park
St Mary Cray East
Widmore
Beckenham East & Kelsey Park
Petts Wood
Plaistow (Bromley)
Shortlands Bromley Road
Crystal Palace Park
Goddington
Orpington West
Chelsfield & Green Street Green
Crofton
Orpington South
Bromley Common
St Mary Cray South
Biggin Hill West
Elmers End
Bromley South
Bickley West
Clock House & Cator Park
West Wickham
Eden Park & Bethlem
Chislehurst North
New Beckenham
Penge East
St Mary Cray North
Mottingham
Anerley South
Anerley North & Penge West
Bromley North & Sundridge


Green space deprivation rating vs Income
Bromley
Deprivation rating
(A = least deprived, E = most deprived)
Income index (1 = lowest, 10 = highest)
Biggin Hill East & Cudham
Bickley East
Hayes South & Coney Hall
Chislehurst East & Hoblingwell Wood
Chislehurst West & Elmstead
Keston
Farnborough
Hayes North
St Mary Cray East
Orpington East
Widmore
Plaistow (Bromley)
Shortlands Bromley Road
Langley Park
Crystal Palace Park
Goddington
Chelsfield & Green Street Green
Petts Wood
Orpington West
Biggin Hill West
Beckenham East & Kelsey Park
West Wickham
Bickley West
Eden Park & Bethlem
Bromley Common
Clock House & Cator Park
Chislehurst North
Elmers End
Orpington South
Crofton
St Mary Cray South
Bromley South
Anerley South
St Mary Cray North
Mottingham
Penge East
New Beckenham
Bromley North & Sundridge
Anerley North & Penge West


Green space deprivation rating vs BAME population
Lewisham
Deprivation rating
(A = least deprived, E = most deprived)
BAME population percentage
Blackheath Village
Ladywell
Further Green
Forster Park & Southend
Catford East & Mountsfield Park
Grove Park & Lee South
Downham East
Sydenham Wells
Lewisham Central & Park
Deptford North
Blackheath West
Honor Oak
Loampit & Hilly Fields
Catford Bridge
Chinbrook
Beckenham Hill
Downham West
Brockley East & St Johns
Upper Sydenham
Manor House
Telegraph Hill
Forest Hill West
Culverley Green
New Cross Gate
Lower Sydenham
Perry Vale
Bellingham & Perry Hill
New Cross & Deptford South


Green space deprivation rating vs Income
Lewisham
Deprivation rating
(A = least deprived, E = most deprived)
Income index (1 = lowest, 10 = highest)
Further Green
Ladywell
Blackheath Village
Deptford North
Forster Park & Southend
Blackheath West
Downham West
Downham East
Sydenham Wells
Grove Park & Lee South
Honor Oak
Beckenham Hill
Loampit & Hilly Fields
Catford Bridge
Chinbrook
Catford East & Mountsfield Park
Culverley Green
Brockley East & St Johns
Bellingham & Perry Hill
Brockley West
Lee
Forest Hill West
Upper Sydenham
New Cross & Deptford South
Lower Sydenham
Forest Hill East
Crofton Park


Green space deprivation rating vs BAME population
York
Poppleton, Rufforth & Askham
Rawcliffe & Clifton South
Fulford, Heslington & University
New Earswick
Woodthorpe & Acomb Park
Westfield, Chapelfields & Foxwood
Osbaldwick
Haxby
Fulford Road & Clementhorpe
Dunnington, Elvington & Wheldrake
Clifton Without & Skelton
Huntington
Strensall
Heworth North & Stockton
Wigginton
Acomb
South Bank & Dringhouses
Bishopthorpe & Copmanthorpe
York City Centre
Holgate West
Holgate East
Clifton North
Tang Hall
Heworth South & The Groves
A
B
C
D
E
5
10
15
BAME population percentage
Deprivation rating
(A = least deprived, E = most deprived)


Green space deprivation rating vs Income
York
New Earswick
Rawcliffe & Clifton South
Fulford, Heslington & University
Woodthorpe & Acomb Park
Poppleton, Rufforth & Askham
Heworth North & Stockton
Osbaldwick
Westfield, Chapelfields & Foxwood
Fulford Road & Clementhorpe
Haxby
Acomb
Huntington
Clifton Without & Skelton
South Bank & Dringhouses
Strensall
Bishopthorpe & Copmanthorpe
Elvington & Wheldrake
Wigginton
York City Centre
Holgate West
Tang Hall
Holgate East
Clifton North
Heworth South & The Groves
A
B
C
D
E
4
6
8
10
Income index (1 = lowest, 10 = highest)
Deprivation rating
(A = least deprived, E = most deprived)

Appendix 3 - Links to other organisations

CPRE is the Countryside Charity working for almost a century to support, protect and promote the countryside. https://www.cpre.org.uk/

Fields in Trust has a long heritage of protecting playing spaces, formerly as the Playing Fields Association. http://www.fieldsintrust.org/

Groundwork is a federation of charities carrying out practical community action to tackle poverty and to improve through including local neighbourhood action. https://www.groundwork.org.uk/

Heritage Lottery Fund is the largest dedicated grant funder of the UK's heritage. https://www.heritagefund.org.uk/

Learning Through Landscapes helps children and young people to connect with nature, become more active, learn outdoors and have fun. https://www.ltl.org.uk/

National Children's Bureau (NCB) works to make education, health and social care services as effective as possible to strengthen families and help our children overcome the many challenges that can hold them back. https://www.ncb.org.uk/

National Federation of Parks and Green Spaces (NFPGS) is the umbrella organisation that aims to amplify the voices of Friends Groups across the UK. https://natfedparks.org.uk/

National Trust is Europe's largest conservation charity, looking after nature, beauty and history for the nation to enjoy. https://www.nationaltrust.org.uk/

Open Spaces Society (OSS) Britain's oldest conservation has been defending open spaces, village greens commons and footpaths in England and Wales since 1865. https://www.oss.org.uk/

People's Postcode Lottery Since 2005, players of the Postcode Lottery have raised over £600 million for good causes including projects and activities linked to green spaces. https://www.postcodelottery.co.uk/

Rethinking Childhood Tim Gill leads thinking on children's play and free time, and their evolving relationships with the people and places around them. https://rethinkingchildhood.com/

The Conservation Volunteers (TCV) For over sixty years TCV has helped thousands of people across the UK to find, hep and enjoy their local green spaces. https://www.tcv.org.uk/

The Parks Charter The Charter for Parks has been developed to champion and celebrate the role of quality parks in neighbourhoods and to call on leaders of UK governments to recognise and properly fund parks. https://parkscharter.org.uk/

The Wildlife Trusts runs hundreds of nature reserves at which people can help practical nature conservation activity and get more contact with nature while acquiring skills and building confidence. https://www.wildlifetrusts.org/

Appendix 4 – Government planning policy

The government's planning policy for England rightly recognises the importance of open space for recreation, leisure, sport and people's health and quality of life.

For example, chapter 8 of the National Planning Policy Framework (NPPF) on 'Promoting healthy and safe communities'[140] states:

- That '*planning policies and decisions should aim to achieve healthy, inclusive and safe places*". (NPPF paragraph 91, page 27)
- The need to "enable and support healthy lifestyles, especially where this would address identified local health and well-being needs – for example through the provision of safe and accessible green infrastructure,..." (NPPF paragraph 91(c), page 27)
- The need "To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should:

a) plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;

b) take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;

c) guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs." (NPPF paragraph 92, page 27)

Paragraphs 96-98 of the NPPF also requires that Local Plan policies drawn up by local planning authorities are based on robust and up-to-date assessments of the needs for open space, sports and recreation facilities (including deficits or surpluses in quantity or quality) and opportunities for new provision:

> Open space and recreation
>
> 96. Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision. Information gained from the assessments should be used to determine what open space, sport and recreational provision is needed, which plans should then seek to accommodate.
>
> 97. Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless: a) an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or b) the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or c) the development is for alternative sports and recreational provision, the benefits of which clearly outweigh the loss of the current or former use.
>
> 98. Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.

99. The designation of land as Local Green Space through local and neighbourhood plans allows communities to identify and protect green areas of particular importance to them. Designating land as Local Green Space should be consistent with the local planning of sustainable development and complement investment in sufficient homes, jobs and other essential services. Local Green Spaces should only be designated when a plan is prepared or updated, and be capable of enduring beyond the end of the plan period.

100. The Local Green Space designation should only be used where the green space is: a) in reasonably close proximity to the community it serves; b) demonstrably special to a local community and holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquility or richness of its wildlife; and c) local in character and is not an extensive tract of land.

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