

Draft Director of Public Health Annual Report 2022

Creating a built environment that makes Birmingham a healthier place to live



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1 Introduction

This year's annual DPH report focuses on health and the built environment. The built environment includes physical spaces where we live, work and play as well as the places that connect them. They can all contribute to a healthy life. For example, environments conducive to walking or cycling as part of the daily routine can improve our fitness and reduce car journeys. The use of parks and public spaces can improve mental wellbeing and reduce isolation, help reduce obesity and chronic disease.

The core purpose of the Director of Public Health (DPH) is independent advocacy for the health of the population and system leadership for its improvement and protection.¹ This report highlights the major health implications and opportunities of our built environment in the context of housing, neighbourhood and community, local economy, and movement and access. It includes some inspiring examples of work being done locally to support residents' health.

It explores insight from evidence gathered from direct observation of Birmingham citizens in their natural environment (a digital ethnography study). This describes daily life and travel for locals, explores views about commuting patterns, the quality of neighbourhood spaces and homemaking in Birmingham.

Birmingham has a rich history of public health policy and practice which has been influenced, directly and indirectly, by living and working conditions of residents, and their health. This relationship between the built environment and public health outcomes is shown in **Figure 1**. This shows some of the major public health milestones and developments, globally and in Birmingham, from the 1800s to the 21st century. It illustrates how major progress in population health has occurred by improving general social conditions such as housing, food supply and quality, water, and sanitation. These have been underpinned by evolving standards of land use, planning and design.

Increased population and poor environmental conditions accompanied the industrial revolution, resulting in poorer health for the workers and, as a result, a higher incidence of diseases. The average life expectancy was about 40 years. Efforts to better understand, prevent and cure disease have continued. The field of epidemiology (the mid to late 1800s) emerged from England's efforts to control a cholera epidemic which cost thousands of lives.

Furthermore, factors beyond than 'the absence of sickness' have had a positive impact on public health. Birmingham was named a town around the time of the cholera epidemics (mid-1800s). The back-to-back slums were demolished (also mid-1800s) to develop better housing and stimulate economic development. The Birmingham New Street Station, which now serves as a national transport hubs, has created thousands of jobs. The Edgbaston and Bartley Green reservoirs were major developments of that era (mid to late 1800s).

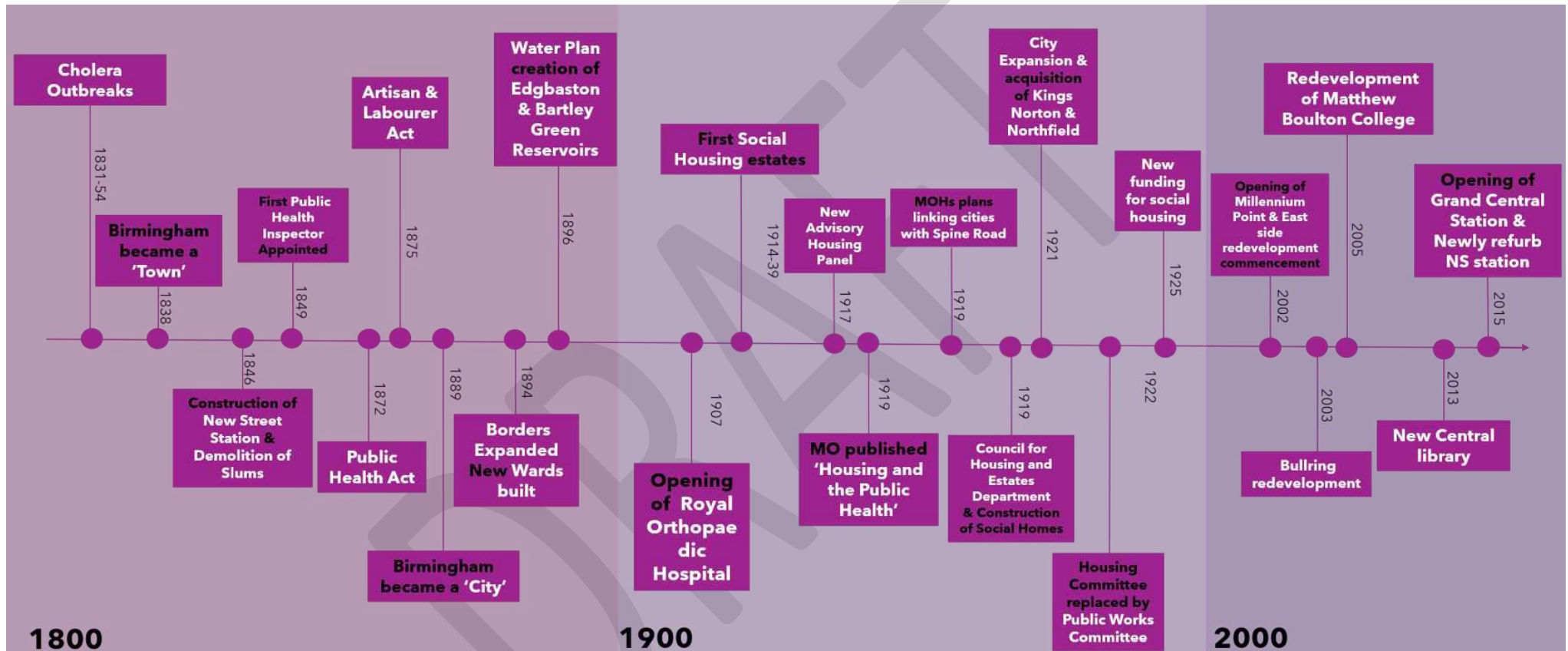
The sanitary movement, which heralded the passing of the Sanitation and new Public Health Acts (mid to late 1800s) was followed by with social concerns which reformers exploited to push for mandatory schooling for children as a strategy to end child labour in factories (mid-

1800s), and concern for nutritious food are just a few examples (late 1800s). These improvements were only possible with government intervention. Following the Public Health Act, local health boards were established, and a Medical Officer of Health was appointed (MOH)

Even greater progress was made in England's public health in the early 1900s. Concern for improving the lives of mothers and children resulted in new local responsibilities for maternal and child welfare, health visiting, school medicine and learning disabilities. Major improvements were made to mental institutions in this period. The first group of social housing estates was constructed in Birmingham following Hill's notion that community cohesion, access to open spaces, and good quality housing supported health and well-being. The National Health Service (NHS) was launched in 1948, and some of these responsibilities shifted from local authorities.

While significant strides have been made in public health throughout the last century, major issues remain. Long-standing health inequalities have worsened. As Britain has become wealthier, for many people diets have become less healthy and their lives less active, resulting in a significant increase in obesity and related illnesses, such as diabetes. Poverty and poor housing continue to harm health. And despite the considerable public health effort, many people smoke, some consume large quantities of alcohol, and social isolation is rife.

Figure 1: The evolution of the built environment and its association with public health



2 The built environment as wider determinants of health

2.1 Defining the built environment

Where we play, live, learn and work has a significant impact on our health and well-being. Previous research has emphasised the relationship between the built environment and individual health outcomes.² The built environment refers to buildings and other built forms such as parks and infrastructure that supports human activity, including transport networks. The built environment consists of six key elements: neighbourhood and community, public and green space, buildings and houses, movement and access, local economy, and the food system (see **Figure 2**).

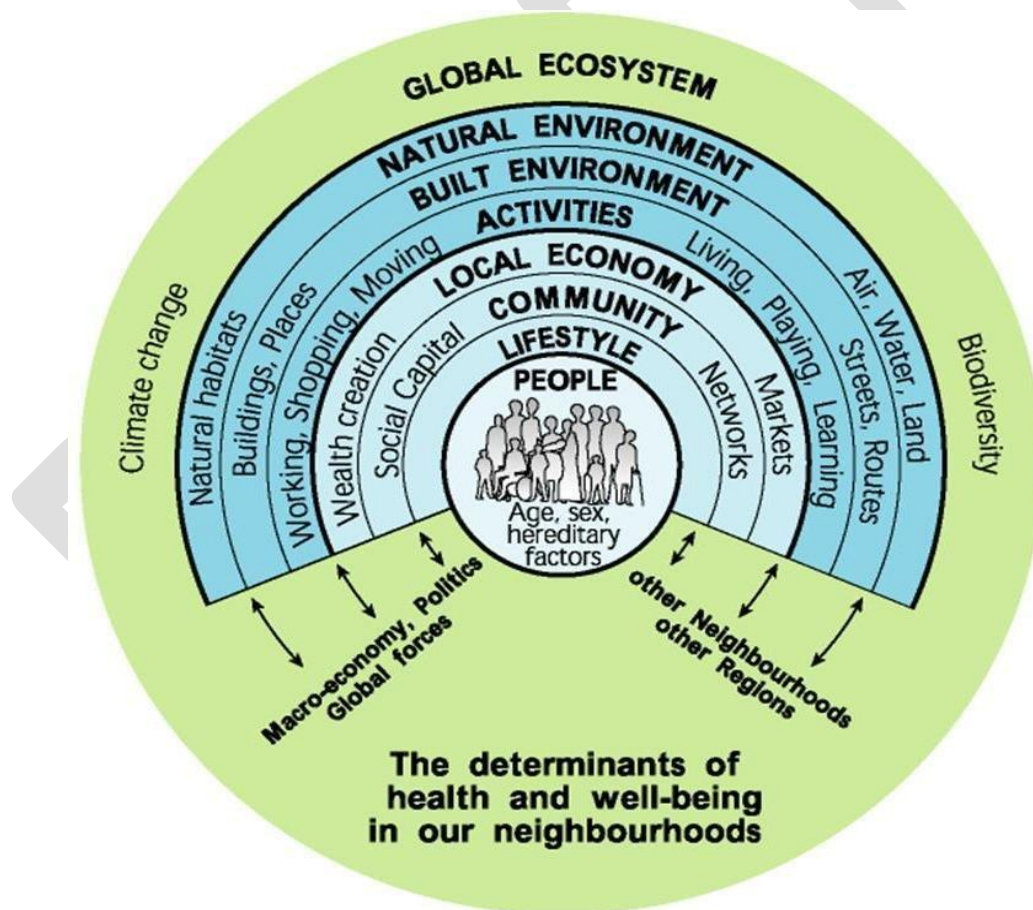
Figure 2: Elements of the Built Environment



2.2 The importance of the built environment for health

The Barton and Grant health map shown in **Figure 3** highlights the relationship between the built environment (wider determinant) and health. The six elements of the built environment are good examples of the social determinants of health including income and education. These broader factors have a 'knock-on' effect on other wider determinants affecting people's health in various ways. They influence our physical and social environments (weather conditions, air quality, civic participation, community capacity and local economy) and so our health and quality of life. According to the World Health Organisation (WHO), "the social determinants of health are mostly responsible for health inequities; the unfair and avoidable differences in health status seen within and between countries".³

Figure 3: The broader social and economic determinants of health and well-being



We want to create a constructive process where we work jointly with planning, transportation, housing, and other council departments to create conditions for healthier lifestyles.

In Birmingham, a social gradient (inequities that runs from top to bottom affecting everyone) across negative environmental conditions contributes to health outcomes, with disadvantage communities experiencing worse outcomes than better off people.

The choice and range of built environment interventions must equal the disadvantage which our residents face. People who live in deprived areas are more likely to be affected by poor housing, high crime rates, poor air quality, unsafe traffic, and a lack of green areas with children's play spaces. They are also likely to experience the negative effects from climate change.

HOUSING

(Quality, design, tenure, affordability)

3 Housing

3.1 Why is housing an important determinant of health?

We are estimated to spend 90% of our time indoors, with 65% of that time spent at home before COVID-19.⁴ If we want to improve individuals, families, and the community's health and well-being, practitioners need to start in the home where most people spend their lives.

Although the relationship between housing and health is complex, providing a physical environment where people can live healthier lives is vital to reducing health inequalities. Good building design encourages physical activity; hence 'active designs' promote health in their developments and create surroundings that are accessible and encourage physical activity. These include, safe, attractive, and labelled stairwells, bike racks, public open spaces, and water features.⁵

There are several housing characteristics that can affect our health and well-being. Poorly designed houses are linked to various physical and mental health conditions.⁶ Housing conditions, such as dampness, mould, cold, and overcrowding are related to respiratory infections, severe asthma, and poor mental health. Inadequate heating is also closely linked to increased excess winter deaths.^{7 8} Poor housing conditions negatively impact children's well-being. Children who live in cold, damp housing miss more school days, suffer from longer-term health problems and disabilities, and are more likely to perform poorly in school.⁹

Those who live in substandard housing often face one or more other disadvantages, including low income, high unemployment rates, and social isolation. On the other hand, age-appropriate, affordable, and safe housing promotes physical and mental health and better life chances.

There is a rich body of evidence linking poor living and housing conditions to human health, from Friedrich Engels and Rudolf Virchow to more recent WHO reports and Marmot reviews of health inequalities. These have added to our understanding of the determinants of health.^{10 11 12}

The disproportionate number of deaths from COVID-19 in ethnic minority communities are often explained partially by the conditions in which people live and work. COVID-19 has highlighted the link between housing and health in two ways: some poor housing conditions, such as overcrowding and poor indoor air quality, have resulted in increased virus transmission; and so, the lockdown measures used to control the virus have resulted in those living in poor housing being exposed to conditions that worsen their health. For some, the measures adopted to contain the virus have meant spending more time in damp, mould-infested, physically dangerous, and inappropriate dwellings.¹³

Housing also has indirect impacts on health, the UK's housing accounts for about a quarter of the country's total carbon emissions. This places housing at the heart of government's commitment to the climate change agenda and have resulted in increased local and national

efforts to improve the quality of existing homes through retrofitting projects. However, retrofitting efforts have not kept pace with need. So, increased investment in upgrading the existing housing stock can generate a variety of co-benefits such as climate change adaptation, fuel poverty reduction and wider public health improvements.

3.2 Housing conditions

3.2.1 Indoor air quality

Indoor air quality is critical for good health due to the amount of time we spend inside. People who can't heat their homes due to high fuel costs are particularly vulnerable to moisture and mould, which can occur regardless of the age of the building (old, recently upgraded, or new residences). Some people are more sensitive to mould than others, including babies and children, the elderly, and those with pre-existing skin and health conditions.

3.2.2 Fuel poverty

Even though it is well acknowledged that upgrading the quality of UK housing stock can result in significant health benefits, the number of homes in fuel poverty continues to increase year on year.

Poor energy efficiency in existing homes, combined with rapidly rising fuel costs, makes it unaffordable for low-income households to heat and ventilate their homes adequately. This can compromise their health and quality of life increasing financial difficulties. Cold homes can have harmful effects on physical and mental health, putting extra strain on the NHS, local councils' social care budgets and the Department of Work and Pensions supplementary benefits budget (Winter Fuel Payments and Cold Weather Payments). It also contributes to higher winter mortality rate and long-term health conditions, which are associated with a threefold increase in healthcare costs.¹⁴ According to the Committee on Fuel Poverty (2021) report 46% of the people in the fuel poverty were excluded from getting assistance from existing fuel poverty alleviation programmes as they did not receive any qualifying benefits.

3.2.3 Housing tenure and affordability

Another aspect of housing vital for health and well-being is feeling secure in your home. Insecure housing tenure or the threat of eviction can have [a significant emotional impact on mental health](#), sense of belonging and community connection. People who live in insecure housing are three times more likely than those who live in secure housing to experience mental distress. Children have been reported to suffer from behavioural issues, educational delays, depression, low birth weights, and other health concerns because of housing instability.¹⁵

Insecure housing tenure restricts 'home making' for those living in the private rented sector, and tenure insecurity has made it difficult to feel settled.¹⁶ The affordability of housing has clear health implications. The shortage of affordable housing limits families' and individuals'

choices about where they live, resulting in lower-income families living in substandard or overcrowded homes.

Young people on low incomes in private rented accommodation generally live in low-rent accommodation and houses in multiple occupations (HMOs).¹⁷ This raises concerns about privacy, control and choice, and various environmental problems.¹⁸ An Australian study of low-income rental households found housing insecurity linked to a lack of privacy, belonging, physical comfort, housing mobility, housing instability, and feeling unsafe.¹⁹

3.2.4 Health impacts of housing

Our home, the location, and the physical structure itself impact practically every aspect of our lives, from how well we sleep how often we see friends to how safe and secure we feel.²⁰

Housing affordability and health have been shown to have a bi-directional relationship, implying that your physical and mental health affects the type of housing you can afford and vice versa. People living in good quality, secure, affordable housing have fewer health problems. The reverse is true for people living in substandard, insecure, and unaffordable housing. These consequences are more evident for more vulnerable populations, such as single parents and low-income households.

Indeed, housing affordability is likely to affect people's health and well-being in at least two ways:

1. People with restricted budgets and resources may choose between housing affordability. This includes location and access to jobs, education, and daily life services, such as schools, recreation, shopping, and food availability. The amount of time spent travelling increases sedentary behaviour while reducing the time available for local physical and social activities.
2. Individuals with less money could find that the suitability of available housing may be limited. They could live in lower-quality residences or neighbourhoods (high crime and incivilities) and overcrowding. A wide body of research suggests that poor housing quality (insufficient insulation, lack of heating) and overcrowding are linked to lower housing satisfaction, poor mental health, greater risk of contracting infectious diseases, respiratory illnesses, and injuries. These effects may be increased for people who live in unsafe neighbourhoods because they could feel restricted when going about their daily lives.

3.3 Local context

Birmingham City Council has a housing stock of 60,673 units and many of these properties are in good condition. In 2021, the total housing stock in Birmingham was 445,276 with an estimated 89,000 new homes need by 2023. Housing occupations across Birmingham are broken down as follows: private sector 75% (owner-occupied and private landlords), council 13% and other housing associations 12%.²¹ The poor housing quality is spread across council

blocks, the private rented sector, HMOs, and temporary accommodation. A recent listening campaign by the homeless charity Shelter revealed many families currently living in sub-standard housing.²²

The private rental sector satisfies the needs of a diverse group of people, but it does have some problems. This is because the number of people renting their homes from private landlords has increased, and the trend is expected to continue. Private landlords mostly provide decent quality housing. But there are concerns about high rental cost, security of tenure, and house condition which continues to be a problem for individuals. In the 'Home Truths' campaign, 17% of private renters report in the study housing insecurity and instability.

Overcrowding is a major concern for the city, with 9% of homes in Birmingham classed as overcrowded. Outside London, Ladywood has the highest rates of overcrowding (15%). The 'Home Truths' campaign found that 22% of people lived in unsuitable homes for their household size, and 19% of people in temporary accommodation reported overcrowding.

Birmingham residents have poorer health outcomes than the national average. The city has unusually high rates of homelessness: over three out of every 100,000 households were homeless in 2019, which is more than 50% higher than the national average.^{23 24}

There are several disadvantaged neighbourhoods, especially in the city's inner sections. This is geographically related to other social issues such as overcrowding (worst in western areas), poor health and poverty. These areas often have lower levels of tree canopy cover and green space. Unemployment is a serious problem, and the employment rate is well below the national average.

An estimated 8,000 houses in Birmingham lack central heating and can't heat their homes to the temperature required to be healthy and warm. In the latest estimates (2019), around 69,692 (16%) households in Birmingham were fuel poor.

3.4 What is already underway?

3.4.1 Public realm projects

The city's growth strategy will deliver 51,000 new homes by 2031, and much of this work is already underway. Perry Barr will have the 1000 homes residential scheme, and the Eastside and Langley Sustainable Urban Extension (SUE) will consist of approximately 6000 homes. Improvement on council-owned houses is underway, including a £4.5 million retrofitting of 80 fuel poor council-owned properties and a £67 million independent living adaptation programme with more regeneration work to come.

3.5 Recommendations

Future development on brown sites will deliver sustainable compact communities that will create local jobs for local people, encourage active travel and reduce reliance on cars.

3.5.1 Lifetime homes

Birmingham's current commitment to lifetime homes is critical for future high-quality housing provision (BMHT). All new homes will have accessibility features and will be energy efficient. These changes will aid Birmingham's ageing population by allowing more individuals to 'age in place,' lessening the need for residential care.

3.5.2 Ensure enough affordable homes in regenerated areas

According to the Birmingham Housing Strategy 2019-2029, individuals will be able to access and maintain affordable housing that meets their needs. As more people find it difficult to acquire a home, private renting has increased. Rents are increasingly rising beyond the means of low-income families. As a result, it's critical to create a diverse selection of affordable housing to fulfil the demands of households across the economic scale.

Support the city's effort to help those experiencing homelessness and connect residents to the issue. Our findings suggest that this can generate a wider sense of safety and pride in local neighbourhoods.

3.5.3 Recognise the possible impact of affordable schemes on overcrowding

Housing affordability is reflected in the extent of overcrowding in the private rented sector. We recommend that the council expand permitted developments rights to allow private landlords to extend rented properties allowing renters more room as their family grows. Affordable schemes under housing regeneration must target those most vulnerable to overcrowding, particularly those with children.

3.5.4 Support families and housing improvements through the winter fuel payments

Winter fuel payments are available to all adults 65 and over regardless of need (10% of beneficiaries). We recommend that the council realign the Winter Fuel Payment budget to assist people who are most in need with their energy costs and use the remaining funds to improve the energy efficiency of fuel-poor homes.

3.5.5 Ensure safe and affordable housing for private renters

We recommend that the council put better regulation and enforcement standards for private rented landlords in place.

3.5.6 Ensure warmth for all

We recommend a city-wide retrofitting programme of existing housing across all sectors to reduce fuel poverty and a commitment to build low carbon social housing that is efficient.

Investigate and promote insulation incentives and regulations to help increase the number of properties that can get insulated to improve residents' health and well-being.

3.6 Policy reference

Birmingham Design Guide²⁵
Birmingham Development Plan²⁶
BHMT housing Plan²⁷
Langley SUE²⁸
WMCA: Zero Carbon Neighbourhoods

DRAFT

NEIGHBOURHOOD and COMMUNITY SPACES

(social & community infrastructure, land use, public open spaces)

4 Neighbourhoods and Community Spaces

4.1 Why are neighbourhoods and communities a determinant of health?

While the conditions in our homes have important implications for our health, wider determinants (conditions) in the neighbourhood, community, and 'place' surrounding our homes can also significantly impact our health. The neighbourhoods design surrounding a home is crucial because it allows for social contact, access to nature, exercise, schools, and local facilities. Also so are the policies that make access to a healthy and affordable home possible for everyone. All these factors influence how much a person enjoys living in their neighbourhood, but also their health and well-being too.

Well-being in neighbourhoods is strongly linked to the [ecological dimensions](#), including physical (air), built (housing), services (educational), socio-cultural and reputation. Well-designed and appealing neighbourhoods with more people on the streets promote natural surveillance, making the neighbourhood appear and feel safer while encouraging social interactions (create social capital). Poorly designed neighbourhoods can make it difficult for vulnerable people to leave their homes, leading to social isolation and premature mortality.²⁹

Attractive neighbourhood places support physical, psychosocial, and emotional well-being. Better street lighting, less noise pollution, well-kept pavements, green spaces, and streetscaping have all been shown to boost residents' sense of safety and civic pride.³⁰

4.2 Land use (planning)

Research shows that in comparison to residential areas separated from local services (segregated use planning) mixed-use spatial planning is more likely to produce healthy settings. The use of mixed land often includes high-density residential areas where people can live locally and meet their daily needs. Such as, for example, access to work, schools, grocery shopping, and places to socialise, child and medical care, and exercise.³¹ This arrangement allows for more compact communities that enable people to access services within [15-minutes](#) of their homes by walking or cycling, encouraging non-intentional physical activity.³² The ability to 'live locally in this way reduces both the number and length of journeys made daily, reducing carbon emissions. It also creates conditions for healthier, happier communities.³³ Mixed-used development also encourages social engagement, reducing social isolation.³⁴

The concept of the [15-minute neighbourhood](#) (also called the 15-minute city) was visible during the COVID-19 pandemic. Neighbourhood amenities were significant when more people worked from home, and fewer people went out owing to public health measures (lockdowns). Local shopping for basic items and active transportation became more important. There were areas that applied outdoor hospitality, slow roadway initiatives and temporary cycle lanes. Some residents may continue to value local life more moving forward because of the shift toward working from home and discovering their neighbourhoods.

4.3 Health and non-health benefits of the 15-minute neighbourhood

Walking and cycling become the natural choice for short trips, enabled by [redesigned streets](#) and space around, between and within buildings that are publicly accessible (public realm). Increased levels of walking and cycling contribute to better physical outcomes³⁵ and improved mental health³⁶ while providing more opportunities to spend time in green spaces, reducing the risk of anxiety and depression.³⁷ The ability to access everyday needs within the local area also contributes to being more inclusive by removing the transport barriers to jobs and services faced by people without access to a car and who often live far from the services on which they rely.^{38 39}

4.4 Roads, streets, pavements (public spaces)

"If you plan cities for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places." —Fred Kent, Project for Public Spaces

Streets account for over 80% of all public space in most cities worldwide. When properly built, they provide commerce, cultural energy, a safe place to meet people, stay, or simply pleasant to travel through. However, our streets have often become dangerous places dominated by cars, noise, air pollution, and danger to active users.⁴⁰

Vehicular traffic is the main source of health-harming noise and air pollutants such as nitrogen dioxide (NO₂) and Particulate Matter (PM). Living near major or high-density traffic has been associated with short and long-term health outcomes, including asthma and other respiratory illnesses, adverse birth outcomes, and cardiovascular diseases.⁴¹ The West Midlands Air Quality Improvement Programme (WM-Air) estimates that about 2.8 million people in the region are affected by air pollution-reducing life expectancy by up to 6 months.^{42 38}

Likewise, people living in disadvantaged areas tend to live in more dangerous environments, with higher levels of on-street parking and higher volumes of fast-moving traffic. This implies they are more vulnerable to the dangers of road traffic. In 2019, there were 470 pedestrian fatalities and 21,770 pedestrian casualties of all severity in the UK.⁴³

4.5 Open spaces

Open spaces such as parks and green spaces are important built environment settings for promoting and improving health and well-being. Living close to good quality green spaces is associated with increased physical activity and good health.⁴⁴ Conversely, those with limited access to good quality outdoor spaces are more likely to have fewer social connections and poorer Health, including cardiovascular disease, obesity, type 2 diabetes, and mental health.⁴⁵

⁴⁶

It's becoming evident that spending time in 'blue space,' or near water, can benefit our mental and physical well-being.⁴⁷ Blue spaces should be considered when developing and planning green space, parks, and other natural environment components.

In addition to green and blue spaces, children need play areas to maintain healthy lifestyles. Informal play burns calories and has substantial benefits in maintaining a healthy weight. Green and blue spaces and play areas need to be accessible, safe, of good quality to deliver effective physical and social benefits.^{48 49}

4.6 Health and non-health benefits of open spaces and community infrastructure

"Public spaces are especially good arenas for creativity and collaboration between governments, the private sector, and citizens for creating vibrant and inclusive neighbourhoods and districts." – John Kaw, *The Hidden Wealth of Cities: Creating, Financing, and Managing Public Spaces*

One in six deaths in the UK is attributed to physical inactivity, and obesity rates are increasing for both adults and children. Compact and connected street networks with fewer lanes on major roads (pedestrianised streets) encourage walking and cycling and reduce morbidity for lifestyle diseases. In addition, street network design has a significant impact on road safety.⁵⁰

Surface transport is a significant source of greenhouse gas (GHG) emissions (22% in the UK). Cities that promote walkability and cycling over car use can help to mitigate climate change by reducing carbon emissions.⁵¹

Parks and green spaces are not only important for recreation but contribute to good health through improved air quality, enhanced physical activity, stress reduction and better social cohesion.⁵² The Glover review also emphasised the importance of connecting people and nature. The WHO estimates that 3.3% of global deaths are linked to lack of recreational areas and poor walkability.⁵³

Parks and green spaces are also crucial for buffering the effects of climate change, such as stormwater management and cooling the urban heat island effects. They also host diverse species of birds, animals, and plants.

Libraries, community, and leisure centres are examples of public facilities and amenities that serve as services for communities and create a feeling of placemaking and social cohesion. Research indicates that people who live near high-quality public places and amenities trust others and feel less socially isolated.⁵⁴

4.7 Local context

Birmingham has over 1.1 million people spread over 26,777 hectares, and this figure is predicted to increase by about 3.7% by 2031. This will boost housing demand and create new opportunities to develop good quality affordable mixed-use sustainable neighbourhoods that provide access to jobs and services. Birmingham's house stock comprises mostly low-rise terraces and semi-detached housing, even in areas close to transport links. **Figure 4** display the land use in Birmingham including major development sites, leisure, education establishments, conservation areas, railway lines and station as well as mixed use centres.

Due to its car-centric development history, Birmingham has high-density residential land use at about 4,300 persons per square kilometre (2018 data).⁵⁵ The high population density in the city has increased productivity, overcrowding and material deprivation.

We depend greatly on the natural environment for our well-being and quality of life. Green, blue open spaces play an important role in promoting and encouraging outdoor recreation, exercise, and relaxation and addressing health issues, including obesity and mental health problems.

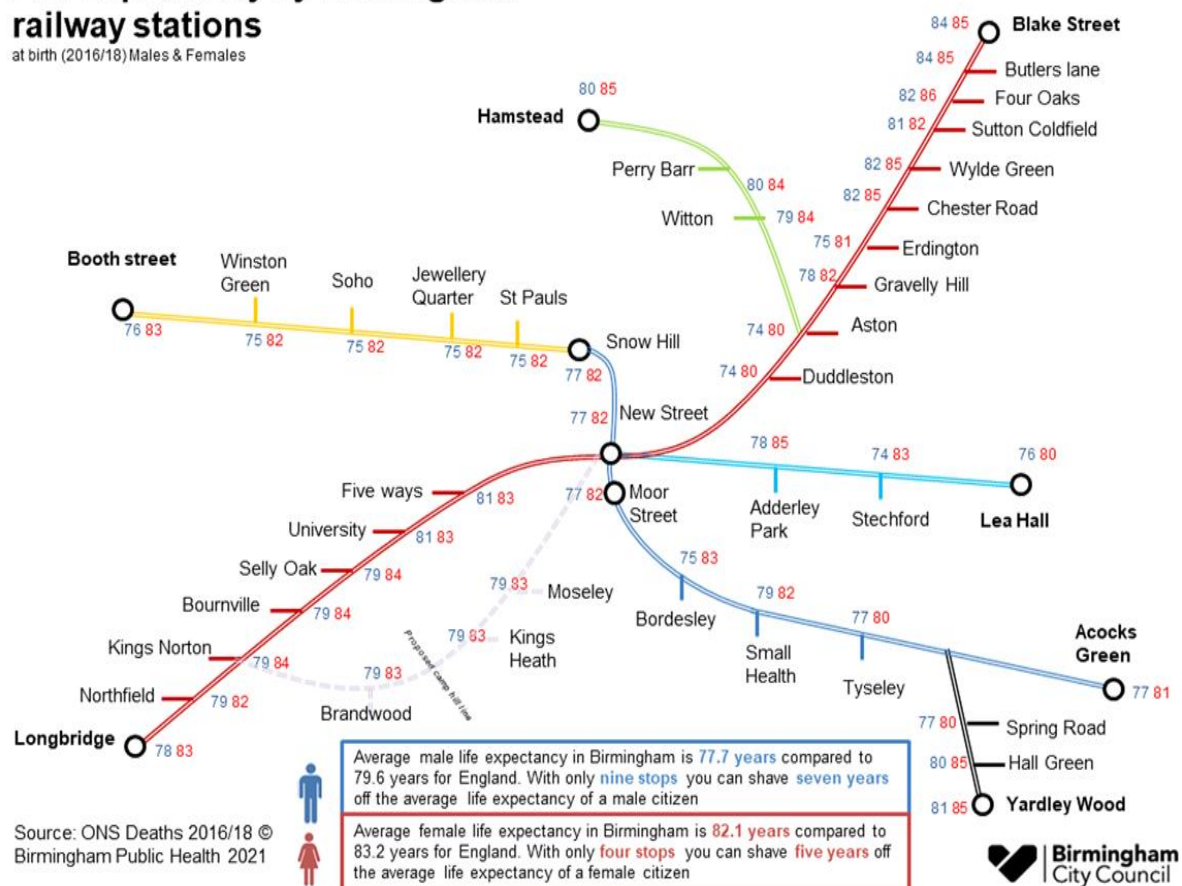
Birmingham is the third most deprived core city in England and is among the least prosperous 10% of local authorities in the UK. The city has one of the highest child poverty rates in England (40%) and is ranked fourteenth for income deprivation affecting older adults. 90% of wards in Birmingham are ranked among the most deprived areas in England.

The gap in life expectancy between Birmingham's least and most deprived areas is 6.2 years for women and 9.9 years for men. It is estimated that 68% of Birmingham adults are obese or overweight, and 26% of children in year 6 (age 10-11 years) are classed as overweight or obese, which is worse than the England average.⁵⁶

Figure 5: Life expectancy rates in Birmingham

Life Expectancy by Birmingham railway stations

at birth (2016/18) Males & Females



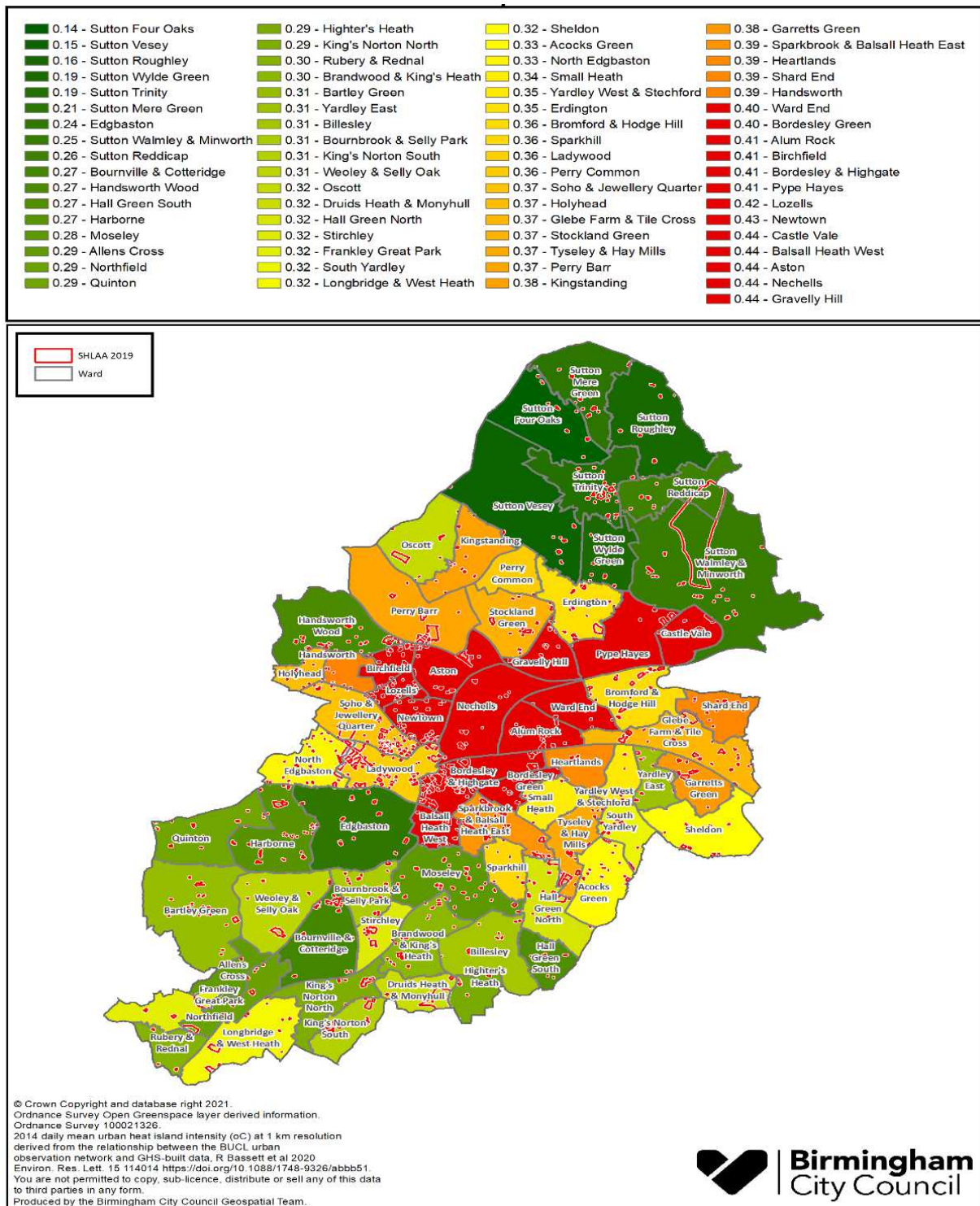
Birmingham is one of the greenest cities in the UK, with over 600 (4,700 ha) public parks and green spaces, many of which are linked by over 160 miles of canals and waterways. The city's parks and green spaces are mostly used for leisure and recreation, with an estimated 58-million visits annually. About 96% of residents have access to green space within 15 minutes of their home. But levels vary between wards (see **Figure 6**); areas with the least green space, as measured by 'canopy cover', the area of leaves, branches and tree trunks are among the most deprived.

For instance, the ten wards with the least canopy cover are all among the poorest 10th of wards. An additional 400 green space provision is needed to meet the national required standard for green spaces and play areas in the city.

Birmingham's parks and greenspace provide a net benefit to society of approximately £600 million each year, including £192 million in health benefits.^{57 58} There are several other benefits that green spaces provide to the city's wider ecosystem that contribute to health. For example, through carbon capture (350 tonnes each year), quality-adjusted life-years (3,300 per year)⁵⁹ and biodiversity.

Birmingham aspires to become carbon-neutral by 2030, with the main goal of requiring about 80% of all trips to be made on foot, bike, or public transportation. The city's road network is quite complex, with around 12 major radial routes, two ring roads, and a stretch of the A38M running through it. In addition, the city is encircled by four heavily travelled motorways, M5, M6, M6 Toll, and M42. The average congestion level in 2021 was 24%. This means a 30-minute drive took 7 minutes longer.⁶⁰

Figure 7: Environmental justice map displaying the mean value for the combined index by Birmingham ward



4.8 What is already underway?

4.8.1 Our Future City Plan 2021-2040

The Our Future City Plan (OFCP) outlines Birmingham's commitment to 'lifetime neighbourhoods' within regenerated areas (Port Loop) towards becoming a bolder, greener city. Achieving net-zero is embedded in the plan and all regeneration and new developments will be sustainable. Mixed land use will make housing, transportation, public services, civic spaces, and amenities more accessible to residents, allowing people of all ages and abilities to participate in their community.

4.8.2 Birmingham Transport Plan

The Birmingham Transport Plan (BTP) sets out plans to reclaim Birmingham streets as public spaces and reduce car use. These plans sit within the OFCP and will rebalance the use of streets so that pedestrian and cyclists have their equal share of the street. Communities will recover the full use as means of social engagement.

4.8.3 Urban Forest Master Plan⁶¹

The Urban Forest Master Plan takes a 'green approach to public health' that will safeguard our treescape for the long-term protection and advancement of the city's biodiversity and the health and well-being of residents.

4.8.4 Green spaces and play areas

Birmingham falls short of the recommended open space per person (2.05 ha per 1000), and the provision for an additional 400 spaces is built into the City of Nature Plan. Additionally, there is 123,971 square metres of play provision for children.

4.8.5 Public Realm projects

Investments and improvements under Legacy 22 is helping to make Birmingham into a city to grow, live, work and age well with further work commencing on Colmore Row, Waterloo Street and Victoria Square. The East and Southside of the city are transforming with the construction of the Eastside metro extension and the 42-acre Digbeth development, and high street revamp. Improvement works in the Southside will change walking and cycling connections from New Streets station to the Southside. Other big projects include the Perry Barr plan, £1.9 billion Smithfield development, Peddimore, and the Birmingham Health Innovation centre. HS2 is already delivering investment and jobs to the city, but it will provide a massive economic boost and set the city on a long-term positive path when it is completed.

Birmingham now has over one million trees, including 76,000 street trees. This creates a more appealing atmosphere for residents encouraging them to spend more time outdoors. But safety in the public realm is a key concern for residents. This was highlighted in the

commissioned ethnographic research, where poor street lighting was a major concern for pedestrians and drivers.⁴³

4.9 Recommendations

4.9.1 Nature-based solutions

- Continue to support citizen involvement in tree planting activities to enhance and conserve the natural environment
- Promote nature positive built environment design (green roofs), maximise future opportunities to improve, enhance or add to greenway networks and create compact lifetime communities through Planning and Development
- Multifunctional uses of green spaces (food growing)
- Addressing flood risk and low levels of biodiversity quality in parts of the city.

4.9.2 Mixed-use buildings

Denser urban composition with more mixed-use buildings and mid-rise apartments allows people to live closer to public transport links. Implement local development orders to plan for mid-rise housing near current and new transport links.

4.9.3 Provide online resources to encourage the use of public spaces and recreational activities

Although Birmingham has many parks and blue and green spaces, residents need to be more aware of these spaces and what activities can be accessed. We recommend creating an online directory of these spaces, including play areas, parks with public toilets, picnic areas, bike and walking paths, exercise equipment, parking, and cafes.

4.9.4 Increase the quantity of play provision

To improve the physical activity of Birmingham's children, we recommend increasing opportunities for informal play. Enforcing the Birmingham Development Plan's development requirements, which compel all developers to assess need and offer (or help fund) play provision, will assist in achieving the necessary increase.

4.9.5 Outdoor sports provision

We recommend that the council increase provision and quality of outdoor sports fields, including outdoor gyms.

4.9.6 Create healthier communities

Advocate for the 15-minute neighbourhood to empower communities to make healthy choices, build community spirit, connect with others, and grow the local economy.

Design and promote initiatives and campaigns to counter fly-tipping and demonstrate the Council is aware of and cares about this issue.

Use messaging to increase awareness and knowledge of what Birmingham City Council is already doing to improve neighbourhood and community spaces. This will increase visibility and counteract the perception that the Council cares more about affluent areas.

4.10 Policy reference

National and Regional context

25 Year Environment Plan⁶²

Transport for West Midlands Transport Plan⁶³

Healthy High Street: Good placemaking in an urban setting.⁵²

Local policy context

The City of Nature (in consultation)

Urban Forest Master Plan⁶⁴

The Climate Action Plan⁶⁵

The Green Living Spaces Plan⁶⁶

The Parks and Open Spaces Strategy⁶⁷

The Birmingham Tree Policy⁶⁸

Birmingham Design Guide²³

Birmingham Development Plan (BDP)²⁴

Langley SUE⁶⁹

BHMT housing Plan²⁵

LOCAL ECONOMY

(High street, employment, education, and services)

5 Local Economy

"Ultimately, we must ensure town centres and high streets are tasked with the role of lifting communities, not draining them. The proliferation of fast-food takeaways, vape shops, payday lenders, betting shops and off licences have damaged communities and become a catalyst for public health, debt and addiction problems." Bill Grimsey

5.1 Why is the local economy a determinant of health?

The COVID-19 pandemic has raised concerns about job security and the critical link between the economy and health. It has drawn attention to the large number of people in the UK who are in poverty or at risk. We need prospering communities and for this to happen people must be financially secure. The local economy must provide services that encourage rather than deter people from healthier habits.

Employment opportunities significantly affect population health. Unemployment is linked to poor physical and mental health in the short and long term due to fewer financial resources to live a healthy life, stress associated with job loss and financial difficulty, and higher levels of fuel poverty and homelessness.⁷⁰ Also, the quality of available local jobs directly affects health. To lead healthy lives, people must earn a living wage. Insufficient income means that people cannot afford good quality housing, healthy food, or leisure services. Developing regional employment and investing in human capital is essential to improving long-term local health.

The local economy impacts on health since it determines the services that are provided. The Royal Society for Public Health used the prevalence of fast-food outlets, bookmakers, tanning salons, and payday lenders to indicate poor health on the High Street in their Health on the High Street report.⁷¹ In contrast, community pharmacies, health services, leisure centres, libraries, pubs, and bars indicated good health. All these services impact on health by influencing lifestyle.

The level of education a person achieves has a direct impact on general health and well-being but also the economy. The Human Capital Theory conceptualises education as an investment into the economy by increasing people's productivity.⁷² The level of education a person has can influence their abilities to promote health, including skills, reasoning and effectiveness.⁷³ A lower education level is associated with poor health outcomes, chronic conditions, functional limitations and disability.

The pathways in which education leads to better health can be grouped into four categories: economic, health-behavioural, social-psychological, and access to health care. A higher education level enables people to have more stable jobs with higher incomes.⁷² Health harming behaviours such as smoking, excess alcohol consumption, inactivity and unhealthy dieting are linked to lower education levels.^{74 75} The neighbourhoods where people live also affect their socio-economic opportunities and vice versa.⁷⁶

Neighbourhood poverty creates social disorganisation and disorder among neighbours. A neighbourhood with fewer opportunities for employment or neighbourhood facilities may nurture a hostile environment between residents.⁷⁷ This behaviour can limit social cohesion and may leave residents unable to control deviant behaviour or enforce positive attitudes towards education.⁷⁶

Carbon emissions impact people's health through air pollution, climate change, and more. Economic activity is one of the main causes of carbon emissions. With local authorities' commitment to reach zero carbon by 2050, we are likely to be seeing a shift by UK business and industry toward 'green' sectors, which will have significant implications for health, education and skill and the wider economy.

5.2 The High Street

Around 80% of the UK population currently lives in cities,⁷⁸ and the high street is just one aspect of the urban environment. Its architecture and design influence how we use our high streets, whether they are somewhere we enjoy being or avoid, if they nurture community and social connections or encourage us to walk away quickly with our eyes down. The amount of traffic, how accessible it is for pedestrians, and how safe we feel affect whether we visit a local high street or prefer to shop online from the comfort of our own home.

The high street is largely a transactional environment where we can spend time relaxing with friends or shopping. We can also gain cultural experience or a sense of well-being from engaging in a dance or exercise class. But this exchange is not always beneficial to our health. The high street enables and supports unhealthy behaviour when our time and money are converted into a loss at the bookmaker, a tan from a sunbed, a high-cost loan, or a cone of fish and chips. On the other hand, healthy high streets promote good health, provide easy and inclusive access to many users. Health-promoting high streets are clean, safe, walkable and promote active participation contributing to social inclusion and cohesiveness and the growth of sustainable urban communities (greenscape and blue infrastructure reduces pollution).^{79 80}

The different approaches outlined above have pathways to improve health. For example, diversifying retail offers can lead to behavioural changes, leading to positive dietary habits or regular exercise in the community. Furthermore, preventing crime and safety initiatives can provide opportunities for social interaction, access to services and community activities, and social cohesion.⁷⁰

Many high streets are saturated with fast food outlets. They do not offer fresh produce or a variety of healthy or suitable food options for all communities, e.g. vegetarian, vegan, religious diets. Fast food is easily accessible as it is cheap and quick; however, consuming unhealthy food regularly can increase obesity, high blood pressure and diabetes. Research has established that those living in the most deprived areas have a disproportional number of fast-food outlets close to them compared to those in more affluent areas.^{81 82}

5.3 Local Economy and Employment

A healthy and flourishing high street impacts the economy while indirectly influencing health. A thriving high street will provide its inhabitants with employment opportunities and improved living standards. **Figure 7** highlights the factors that directly and indirectly impact health outcomes in the high street-built environment.

Figure 8: Approaches to improving the Built Environment in High Streets. Adapted (Source PHE, 2018)



5.4 Local context

Despite showing strong resilience, the local economy has been severely disrupted. The footfall in Birmingham City Centre decreased by 46% from June 2020 to June 2021, which has impacted the economy and the ability of businesses to thrive.⁸³ The regional Gross Value Added (GVA) dropped by 13%, with overcast recovery not expected till 2022 at the earliest. The GVA measures the contribution made to an economy by one individual producer, industry, sector, or region and directly reflects the economy.

Birmingham has a strong economic centre in the 'financial district' where most high-paying jobs are concentrated. The financial district consists of business, finance, and professional service sectors. It is worth 17.2bn and with 206,200 jobs.⁸³ The city's most deprived areas are east and west; the most affluent areas are north. **Figure 8** displays the distribution of deprivation in Birmingham by LSOAs (Lower-layer Super Output Areas). LSOAs are small areas designed to be of a similar population size. 41.3% of Birmingham's LSOAs are living in the 10% most deprived LSOAs in England. This includes Hodge Hill, Ladywood, and Erdington

constituencies. Communities of ethnic minorities tend to be concentrated in the less well-off and under-resourced neighbourhoods.

On the other hand, Birmingham's population is relatively young, with about 38% of the population being aged 25 years and below and so has a strong pool for the workforce. Youth unemployment rose to 13.8% in Birmingham in 2020, and young people also had a higher instance of furlough resulting from the closure of various venues and sectors due to COVID-19 pandemic restrictions. The skills gap also restricted business growth significantly. Of 57% of firms in Greater Birmingham that attempted to recruit in quarter 3 of 2021, 62% had great difficulty in doing so.⁸³ As a result, Birmingham has low productivity compared to the rest of the nation.

Figure 9: Distribution of Deprivation in Birmingham by IMD Decile, (1 (10% most deprived) to 10 (10% least deprived). Adapted (Source PHE 2021)

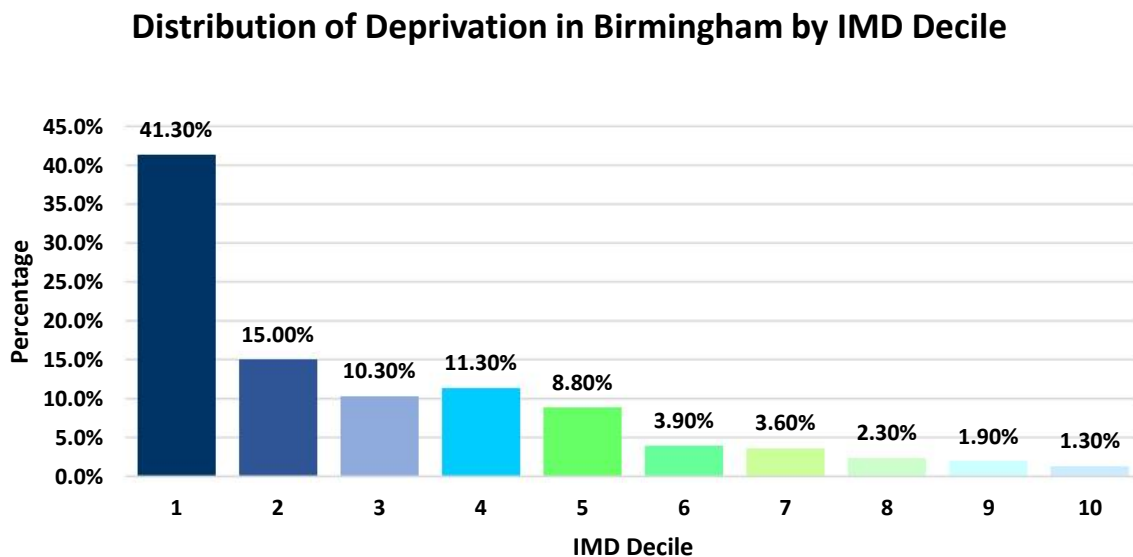


Figure 10: Deprivation by sub-domain

Deprivation in Birmingham by Sub Domain



5.5 What is already underway?

Despite the economic disruption caused by COVID-19, the Birmingham economy is on a steady path to recovery.⁸³ Birmingham is predicted to have the 7th fastest employment growth rate by the end of 2022, increasing year-on-year by 2.2 % and adding almost 14,100 new positions filled. Furthermore, the GVA is expected to have increased year on year by 7.5%, with a 3.9% increase in the number of people in employment. Several projects are currently underway to strengthen the local economy and recover the economy.

5.5.1 Economic Recovery Strategy

Birmingham's Economic Recovery Strategy sits alongside the plans set out by the Combined Authority and the Local Enterprise Partnership⁸⁴. The strategy draws together actions and priorities under six recovery themes:

1. Develop a city recovery vision built on collaborative public services.
2. Inclusive Economic Recovery, tackling existing and new inequalities to leave no one behind.
3. Community Capacity, Community Power, infrastructure, and support platforms to VCFSE organisations.
4. Social Recovery, prevention, early intervention, and whole life course approaches change our relationships with citizens.
5. Localisation working in neighbourhoods.

6. Service Integration across organisations to achieve an effective system for recovery

The economic recovery strategy aims to deliver 100,000 new jobs, 350,000 square metres of new retail space, and 745,000 square metres of new office space by 2031. Much of this work is underway.⁸⁴ For example, Paradise and Arena Central developments in the Westside area of the city and the Perry Barr district centre developments.

Furthermore, six Economic Zones have been created to cluster economic activity within high-quality business environments. Delivering high-quality office accommodation for growth in business, financial and professional services and supporting digital media and creative industries

Hot Food Takeaway Policy

To prevent the oversaturation of hot food takeaways in Birmingham highstreets, the Hot Food Takeaway policy was introduced⁸⁵. The Shopping and Local Centres Supplementary Planning Document was adopted in March 2012 and was produced to help address issues affecting the vibrancy and vitality of Birmingham's largest 73 shopping centres.⁸⁵ One of the policies outlined in this was to avoid an overconcentration of hot food takeaway uses by restricting their number to no more than 10% of the total units in a centre or individual parade. This prevents any new establishments from being built if going over the 10% threshold. This is monitored yearly to ensure that local centres and primary shopping areas remain diverse.⁸⁵

Levelling up Strategy

The Levelling Up Strategy promises prosperity and opportunity for all residents. The vision is to accelerate growth and harness it for a more equitable city. The Commonwealth Games will add energy to this process, creating jobs, and community participation and pride. The strategy aims to delivery equity across education, skills, jobs, and housing. The TEED project is an example of what is possible delivering the aims within the strategy.

5.6 Recommendations

5.6.1 Edible Landscapes

We recommend the implementation of edible landscapes to complement work already underway to create a greener city. Edible landscaping incorporates edible food plants into the design of landscapes. As well as serving an aesthetic purpose, the plants can be consumed by users of such spaces⁸⁶. Edible landscapes encompass a variety of garden types and scales but do not include food items produced for sale. Incorporating this feature into recreational areas and local high streets would be beneficial.⁸⁶ Projects such as this have already been introduced to some major cities, including London via the Edible Landscapes London non-profit community education project.⁸⁷ This has enabled a food growing designing system to mimic a natural ecosystem in urban areas, creating 'Urban Food Forests'. This project specialises in forest gardening and has produced the first-ever accredited forest gardening course in the UK, which could be used as good practice.⁸⁷

5.6.2 Mixed-Use Neighbourhoods'

Another recommendation would be to create more mixed-use neighbourhoods near major high streets. Research shows that urban design policies which allow the mixed-use of neighbourhoods and give opportunities to residents to live closer to their workplace are beneficial to health and economic growth.⁸⁸ Therefore, urban policy development frameworks should support access to a higher density of shops, services, and recreational facilities. Promoting the mixed-use of neighbourhoods, including local high streets, could promote healthy behaviours such as active walking and cycling to work.⁸⁸ Therefore, it is important that high streets and urban areas are accessible to people who use them most often. A longer distance from workplace to home and access to car parking is positively associated with transport-related sedentary behaviour (i.e., car driving).⁸⁸

5.6.3 Increase accessible childcare

We recommend that developers include childcare in mixed-use developments to reduce travel time and distance for parents who live and work there.

5.6.4 Integrate healthier catering assurances into pre-planning applications

Healthy food access should be included in the new BDP and SPD. Pre-planning applications for hot meal takeaways (A3-A5), for example, could demand a commitment to healthy catering. In addition, a tax on hot food takeaway operators should be imposed to support obesity prevention programmes.

5.6.5 Use third sector organisations as a vehicle to drive food growing initiatives

We recommend strengthening the collaboration with third sector organisations and allotment societies already involved in promoting food growing to expand this to individual gardens and innovative ways of growing food at home.

5.6.6 Invest in lifelong education and skills development

The pandemic has demonstrated the unequal impact of employment loss, especially among young people. This means that there must be a greater focus on employment support and career advice for young people entering the workforce, those working in financially unstable areas, and those who may need to change jobs owing to COVID-19 complications.

5.6.7 The economic determinants of health

There have been many missed opportunities to use economic development to improve health and reduce inequalities because public health and economic development strategies are usually developed in silo. The COVID recovery plan and Levelling Up strategy is an opportunity to create a more inclusive economy. We recommend closer working between public health and economic development specialists.

5.7 Policy reference

Birmingham Development Plan (BDP)²⁴

Shopping and Local Centres Supplementary Planning Document (SPD)⁸⁹

Birmingham's Economic Recovery Strategy 2021⁹⁰

Healthy High Street: good placemaking in an urban setting⁵²

Licensing

MOVEMENT AND ACCESS

(Pedestrian, vehicle, public transport)

6 Movement and Access

6.1 Why is movement and access a determinant of health?

The most important function transportation plays in community health is walking or cycling for physical activity (alone or part of public transport journeys). Physically active people have less risk of stroke, dementia, cancer, and type 2 diabetes. Also, active transportation reduces road traffic injuries and air pollution and significantly decreases respiratory illnesses such as asthma.

Traffic calming measures have proven to save lives. While the most significant health benefits come from active transport, vehicle speeds also impact health outcomes. The risk of a fatal accident at 20km for children is less than one-fifth of the risk at 30km

Travel is necessary for connecting people to employment, education, health care, recreation, and other community services. Every day, most people travel somehow, making it a part of their daily lives and thus a factor that can significantly impact their health.^{91 43}

The success of cities and the quality of living is inextricably linked to how people move around within them. The average commuting time in the United Kingdom was roughly 30 minutes, compared to 25 minutes in the European Union. According to Eurostat, 60% of UK workers commuted for less than 30 minutes, and 80% commuted for less than 45 minutes in 2019.⁹²

Research found shorter commuting time to be a consistent determinant of an individual's ability to escape poverty.⁹³ The COVID-19 pandemic has highlighted the disparity across UK communities living in areas with limited transport access who were disproportionately vulnerable to the virus. They could not get tested regularly or take advantage of early vaccine rollouts due to their distance from COVID facilities and lack of transportation. Vaccine penetration was slowest in areas with the most limited transportation networks.³⁰

6.2 How health is impacted

The way we design and build our roadways (transportation network) and how people choose to move through their communities has an impact on health, including exposure to harmful emissions, physical activity, and access to services, amenities, employment, education, and social networks, among other things.

Walking, riding, and taking public transportation are more difficult for some populations. Older people, for example, are more vulnerable to road accidents. The safety and comfort of older persons who use active transportation is affected by factors such as sidewalk design, traffic, rest spaces, and aesthetics.

The difficulties to getting to school securely and conveniently are one of the reasons for the decline in children who walk and bike to school. Community design that encourages high traffic volume and speed while lacking pedestrian and cycling facilities, for example, might result in more injuries and fatalities.

6.3 Local context

Birmingham's transportation network covers large physical areas where residents can access the city in 30 minutes. While the city boasts a large public transportation system, including a local bus network, a metro line, a suburban rail system, cycling and walking routes, including the canal network, Birmingham is highly car-centric, with vehicles accounting for nearly 70% of surface transportation activities. With an average of 80 hours lost annually per driver at an individual cost of £264 and £323 million to the wider city.⁹⁴ In addition to the financial costs to drivers, traffic congestion delays public transportation. It limits the flow of freight and commercial vehicles, all of which are essential to Birmingham's day-to-day retail operations.

Birmingham ranks as the third most transportation-congested city in the UK for commuting.⁹⁵ Public transportation accounts for 58 per cent of morning peak trips in Birmingham city centre alone. In commuting to Birmingham is mainly from Southeast Staffordshire, South Warwickshire, Solihull, and North Worcestershire.⁹⁶

However, its wide-ranging geography results in vastly different transportation experiences and pain points for those who live and work here, with infrastructure and funding discrepancies resulting in worse service for poorer, underserved communities. In addition, area coverage depends on public transportation network capacity, journey times and infrastructure investment.

Over-reliance on private cars has a significant and negative influence on individuals living and working in Birmingham and visitors. Restoring the balance allows placemaking to prioritise people, and travel is enjoyable rather than frustrating.

6.4 What is already underway?

6.4.1 Transport plan

Birmingham's current long-term transportation plan will shift travel priority following typical large European city regions. Car use accounts for 40 per cent of all travels, compared to 70 per cent in Birmingham. In addition, the West Midlands Combined Authority (WMCA) Cycle Charter sets a goal for 10% of all journeys in the West Midlands Metropolitan Area to be made by bike by 2033. The plan outlines large scope investments in active and public transport. Additionally, it outlines plans to reclaim much of the streets for pedestrian and bike use, mobile and sustainable transport modes.

6.4.2 Public realm improvements

Much is happening across Birmingham to work toward a first-class transport system that meets the need of residents and visitors and Birmingham's goal to become a net-zero carbon city. Birmingham is investing in a mix of transport systems, including active travel that encourages cycling and walking, Sprint Bus networks, new and renovated rail stations, and the Midland Metro tram network.

Work is underway to deliver 150 miles of new metro (8 new lines) and rail (Eastside metro), connecting more people to employment, leisure, and services. Passenger services will be re-introduced at Camp Hill, and three stations are currently under refurbishment with plans to build 18 new stations.

Sprint services will provide high-frequency service on major commuter routes, with predictable travel times and schedules. Sprint's first phase will be completed for the 2022 Commonwealth Games on the A34 Walsall Road and A45 Coventry Road corridors. Additionally, Active Travel Fund schemes are delivering extensive reallocation of road space for cycling and walking schemes.

6.5 Recommendations

6.5.1 Active travel (see the transport plan)

Walking and bicycling are most associated with active transportation but skateboarding, scootering, and rollerblading count. These methods of travel can increase levels of physical activity while reducing pollution levels.

Examples of strategies within the Birmingham transport plan to support active transportation include infrastructure design like connected bicycle networks or multi-use trails or policies that provide sidewalks, bicycle lanes, and share-the-road signs to provide safe and convenient travel for all roadway users.

Other proposed initiatives include a workplace parking levy to reduce car use, cross-city bus routes to reduce wait times, sprint rapid transit buses (to be launched in July 2022), an increase in rail freight and the re-opening of train routes and stations. Streetscape amenities such as benches, landscaping, lighting, and public art encourage active transportation.

A proposal to increase public transport subsidy from 10% to 30% may encourage uptake in public transport usage.

6.5.2 Encourage uptake of active travel through communication campaigns and online resources

Basic online walking and bicycle route guides should be developed to boost active travel adoption. We also believe that disclosing actual (as opposed to perceived) levels of safety for walking and cycling could enhance attitudes and, as a result, active travel uptake.

Raise awareness of the quality and availability of public transport (particularly buses) to help alter perceptions and discourage the use of cars.

6.6 Policy reference

WMCA transport strategy – TfWM Draft Transport Plan (in consultation till Apr 22)⁵²
 WMCA Walking and Cycling Strategy
 Birmingham Cycling and Walking Infrastructure Plan⁹⁷

15 Minute Cities
Birmingham Transport Plan⁹⁸
Clean Air Strategy
OFCP
COVID-19 Economic Recovery Plan

DRAFT

ETHNOGRAPHIC RESEARCH

Experiencing the built environment: citizens stories

7 Experiencing the built environment: Citizens stories

Everyone in Birmingham has their own experience of interacting with the built environment. This ethnographic research provides us with an understanding of residents' lived experiences of the built environment. The aim was to gain insight into their daily lives, their interactions with the built environment, and its potential and perceived impact on health and well-being. The research was commissioned by Birmingham City Council and completed by Shift Insight between November 2021 and March 2022.¹

Forty participants from across Birmingham took part (see Appendix X for a full breakdown of participant profiles), and their stories are woven through this section. Ten case studies were developed from journeys citizens made through the built environment in their daily lives. The findings and case studies should not be used to evidence the entire system but rather a snapshot of experience in the built environment. Citizens took all the photos in this section as part of the digital ethnography.

The summary of information gathered from the research is split by subject (housing, neighbourhood and community, local economy and movement and access) while also identifying the origin of these comments.

7.1 Housing

The experiences of the Covid-19 lockdowns led to acute acknowledgements that a person's housing situation, whether positive or negative, deeply affected their experience during the pandemic.

I'm not going to lie, it's been really hard, especially these last two years, the fact that I couldn't go out when we were in lockdown. That was really, really hard mentally to basically be stuck indoors."

Handsworth (Indian, Private rental)

"If I look out of the balcony, I've got a really nice view of Sutton Park. It was actually a pretty big factor in why I liked this flat so much, because it's a nice view that I have from the balcony, and yeah, I don't want to live in a dungeon."

Sutton Trinity

More widely, participants often formed aesthetic judgements of where they lived. Visual cues played a big role in how individuals felt about their surroundings, especially their immediate home environment. Residents mentioned clean, visibly thriving neighbourhoods with calming views.

7.1.1 Housing Quality

A consistent theme emerged here, with participants emphasising the necessity of maintaining a safe and comfortable temperature in the home and how this relates to the quality and design. Highlighting the importance of materials (tile and stone are more difficult to heat), orientation (see lighting below), and floor level (temperature on the bottom floor and top floor more difficult to maintain). The ability to stay warm in the winter and cool in the summer. When it's hot outside, have windows that restrict or boost their ability to keep warm or adjust for ventilation and natural lighting.



"Being a ground floor flat, and concrete as well, obviously you get the elements because it's only PVC and it's quite dated – the windows, the frames. The frames actually go to the floor so yes it can be very cold unless the heating is on, and then, of course, that's costly."

Participants expressed concerns about living in a cold environment. Improvements are frequently insufficient to maintain a comfortable temperature or are too expensive. The use of Economy 7 heaters, a lack of insulation, and residences with high ceilings are not energy efficient and add more to the bills. Residents were aware of moisture and mould forming in their homes because of the constant insufficient temperature.

"Because it hasn't got a window in [the bathroom] and it doesn't circulate air very well, you have to ventilate it quite well, so it doesn't like gather mould and all the rest of it ... I have to ventilate it really well, the air vents and opening my bedroom windows quite a lot. It can seem quite cold."

Erdington (Flat)

"All the windows seem to be getting damp around them and getting like mould on the walls and stuff. It's not major, but you can tell it's been painted over before I moved in. Because our bed is right by the window and it's got obviously damp around it, I think it does make us a little bit poorly. Not poorly ... me and my [partner] have realised that we feel a bit bunged up of a night and a bit of a sore throat in the morning."

Oscott (Flat)

This was especially true for those living in rented homes, and it brought up a crucial topic. Residents who do not own their homes sometimes feel powerless over these decisions. They also stated that these decisions are frequently made so that the landlord will incur a lower direct cost than the expense of heating the house.



Respondents frequently link their mental health to lighting quality in their homes. Their favourite rooms in the house were those with more light. Those with accessibility needs would normally make the necessary changes to their homes to meet their requirements. However, common building accessibility (flats without lifts and a stairwell without a handrail) and parking availability in residential areas were also of concern.

When discussing housing and health, it's important to include a discussion of homelessness, as it's a major predictor of a person's health. Health difficulties disproportionately affect homeless or rough sleeping individuals. According to participants, homelessness is a major issue in Birmingham, and it can contribute to larger crime problems in some locations. On the other hand, several participants perceived homelessness as a tragic aspect of their journeys rather than a problematic issue.

"This (homelessness) is probably the biggest thing in the city that makes me feel sad. The amount of homeless people you see dotted around the city, either along the roads or along the streets begging for money"

Kings Heath

7.1.2 Green and blue spaces

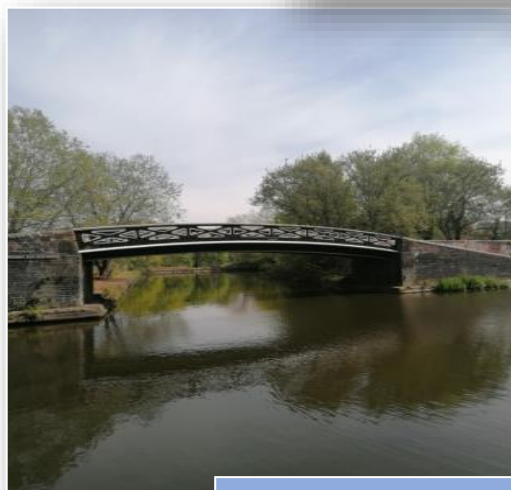
Access to nature and green places was quite important, and they appeared in various aspects of the data. Many emotional accounts about how a shortage of green space during COVID had trapped individuals in cramped dwellings or was being eased by access to a garden or a park. It demonstrated the importance of spending time in green space for mental and physical well-being.

Access to these spaces within their 15-minutes neighbourhood was highly valued, and the research highlighted some green areas throughout the city that were not always consistently well-kept with evidence of litter or substance abuse which could lead to their avoiding and not using them at all.

"This is one of my favourite places in Birmingham and near my house. I love that, although you're in the city, you feel like you're in the countryside. There is no road noise, it's beautiful in the winter and the summer. Having this on my doorstep makes me happy!"



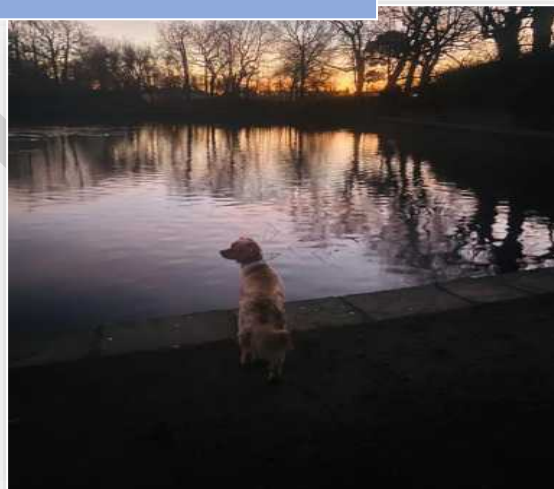
"I believe that harmony is where you find it and I am with one in my own backyard as they say! I am not a great gardener but take peace and tranquillity sitting out on the decking with a nice cup of coffee and just let the world go by ... It is my safe place."



"The little spaces we do have are polluted and not policed or cared for like other parts of Birmingham where it's evident the council are present. "

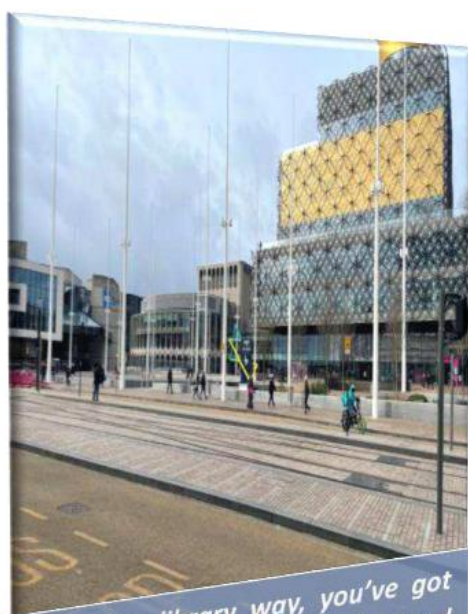


"I feel the water adds to a calmer mood"

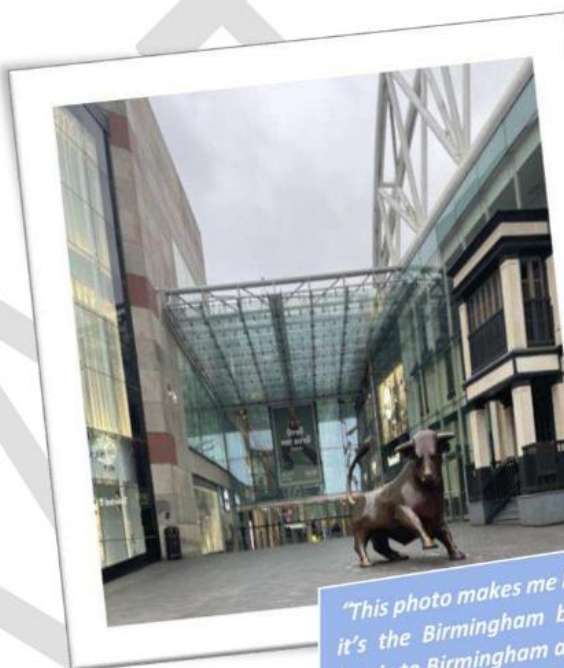


7.2 Neighbourhood and Community Spaces

People spoke about social cohesion and pride in their community, often pointing out the lack of these qualities. Although they made suggestions for change, they were proud to call themselves Brummies. People's hometown and local neighbourhoods needed to have aesthetic appeal. The level of pride people felt was down to maintenance, congestion and pedestrianisation, boarded up or lively shops and restaurants, access to green spaces and seeing less homeless people on the street.



"If you go ... the library way, you've got some old buildings, and then Grand Central way you've got all these modern things coming up, so you go 'Wow, this is nice!' I like this. I like a mixture of things so it's not all the same thing. You don't walk and find the same thing everywhere."



"This photo makes me happy and proud - it's the Birmingham brass bull and it's iconic to Birmingham and the city centre. You only have to show someone this photo and, if they have knowledge of Birmingham or have been, I can assure you they will know straightaway where this photo was taken and what it is, I'm a proud Brummie!"

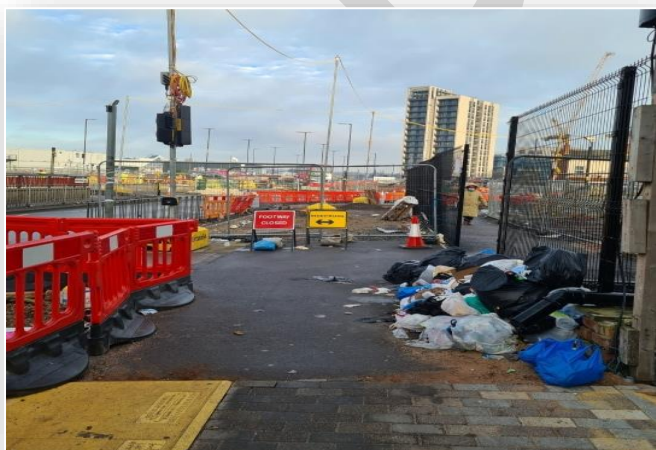
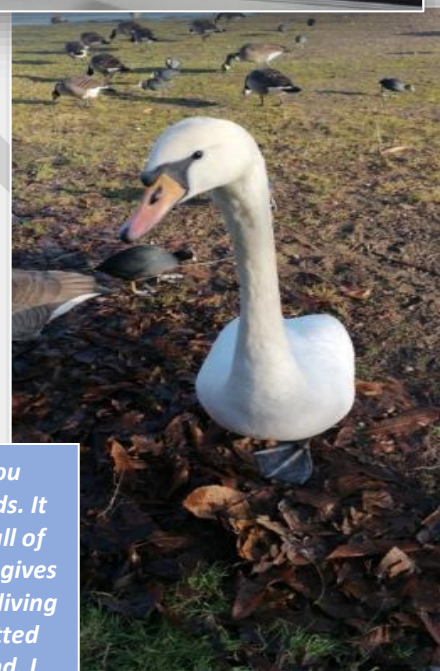


This is a Gurdwara in Handsworth. It's one of the biggest landmarks in Birmingham. Amazing to look at ... Brings back warm happy memories from my childhood. It's nice to see a multi-cultural Birmingham. I feel safe in a mixed area."

"[This photo] shows how people find it easy to fly-tip. There are no consequences for people who do this. I feel the council should introduce collection days for all household items to overcome these scenes ... The fly-tipping needs to be tackled. People need to take pride in their areas."



"It is so big that once you walk through you wouldn't even know you were near any roads. It is peaceful, the grass is well looked after. Full of trees and even has access to an allotment. It gives that green space that you need when you're living in and around the city. There are plants dotted around the edges and plenty of trees around. I really enjoy this park and how easy it is to access it. I can even walk there from my house so, whether I walk or drive, I enjoy this park being on my doorstep."



"This is general waste and recycling that hasn't been picked up for weeks... every road in this area is like this. It makes us not want to exercise in the area"

7.2.1 Lighting

Participants were frequently asked to consider how various circumstances made them feel comfortable or unsafe. We wanted to know whether the environment impacted on their mental health daily and influenced travel decisions. These could be whether to drive, avoid going out in the dark and exercising outdoors. The feeling of safety extended to driving as well, providing insight into drivers' perceptions of city streetlights on well-being.



"I would say the street lighting can be improved and this in turn would allow better visibility, safer driving conditions."



"Lift [is in] the dark ... it was not bright enough for wheelchair users or buggy carriers, which may cause some concern for using the lift, especially in winter season."

"A photo in our local park [that] we use to walk the dog. It's a clean park, nice walking paths, [but] would be nice to have more night-time lights."



7.3 Movement and access

The recurring theme from people is that the city was intended for cars so harder to navigate for those on foot. In terms of sustainability, this was linked to participants' impressions of Clean Air Zones and their belief that traffic had been diverted to different parts of the city. The statistics revealed how multiple roadworks negatively influenced healthy behaviours such as walking, cycling, and exercising. It revealed inconsistencies in behaviour, such as respondents preferred to drive since it stopped them from having to navigate streets as a pedestrian. But they were actually adding to air pollution and congestion by doing so.



"This is probably my worst photo and sums up Birmingham city centre perfectly! ... The area is full of pollution and all you can ever smell is fumes from exhausts or the smell from factories or the builders."



7.3.1 Public transportation

The citizen journeys represent that many residents have access to a local train station and numerous bus stops. Trains were thought to be a good way to avoid traffic and roadworks.

There was a notion that buses were unreliable, vulnerable to congestion, and that bus stops were more likely to be filthy or cluttered. Many of these negative comments were from people who rarely take the bus. Despite the amount of bus routes and stops available, several participants refused to take the bus.



7.4 Local Economy

The city centre was a popular destination for most participants. However, on the other hand, participants' neighbourhoods were strongly featured, which might often highlight the disparity between visible investment in various parts of the city and more suburban areas.

These photographs show participants highlighting areas of the city that appear to be neglected or well-kept.



This image depicts dilapidated or boarded-up shops, which have been linked to feelings of depression, anxiety, and a sense of being 'left behind.' As a result, negative behaviours such as littering, or fly-tipping have become more frequent and accepted as the standard and resistance to walking and exercise.



Highstreets like Boldmere and Sutton was cited as ideal example of what residents want their high street to look like.



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