# Bristol Physical Activity Needs Assessment 2019

An overview of physical activity and inactivity in Bristol UK

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#### 2. Executive Summary

- The data suggests that many adults in Bristol are meeting the Chief Medical Officers' Moderate to Vigorous Physical Activity Guidelines recommendation and will be gaining the associated health benefits. However, there are high levels of inactivity for people living in areas of deprivation and for some equalities groups.
- Exercise has been described as a miracle drug (Pimlott, 2010). Physical inactivity can contribute to reduce multiple diseases including some cancers, diabetes, ischemic heart disease, depression and dementia (Start Active, Stay Active, 2011).
- Sport England Active Lives survey 2017/18 statistics for individuals who have walked and cycled to work in the last 28 days were 19% and 44% for Bristol adults which compares favourably to the statistics for England which were 7% and 33%.
- Active Lives Data suggests that levels of inactivity in Bristol compare favourably to the national average. However the local Quality of Life survey shows that inequalities exist, as the Bristol average of respondents who reported they "do enough exercise" from this data source is 66.1% with the percentage for those living in the most deprived areas significantly lower at 56.4%.
- In the Quality of Life Bristol survey, individuals 50 years or older, disabled people and people of faith and religion had significantly lower percentages which responded that they do enough regular exercise compared to the Bristol average.
- The What About YOUth (WAY) survey 2014-15, estimated that every day 17% of Bristol's 15 year olds take part in at least an hour of physical activity. This is higher than the national average of 13.9% from this data source.
- In total there are 222 individual indoor and outdoor sports facilities in the Bristol area, 500 outdoor sports pitches, 2 adult Park runs and 3 junior Park runs delivered across Bristol.
- Physical activity referral programmes are also encouraging inactive or health risk individuals to increase their physical activity. Referrals are made either through an individual's GP, practice nurse, physiotherapist or hospital consultant. Further programmes are also available for specific medical conditions.
- Citizen Panel surveys showed that respondents would like to be more physically active however are
  prevented from doing so due to barriers within their lives. When answering the question "What limits you
  from doing more physical activity?" 42.8% said time, 27% responded that they were as physically active as I
  would like to be and 21.9% believed work commitments prevented them from exercising more. The least
  common response was facilities with 11.7% answering that there is nothing near me and 0.7% responding
  there is a lack of changing facilities.
- 390 respondents commented on the free text question "Please tell us anything else you would like to on the topic of physical activity, including anything you would like to add to your answers". Respondents expressed a wide variety of concerns which included more street lighting, more cycling routes away from heavy traffic, better pedestrian and cyclist sharing spaces. Furthermore some elderly respondents expressed worries of causing more health problems as the reason they didn't exercise more.

- In a focus group discussing barriers to exercise with 6 women aged 24-55 from South Bristol the most prevalent themes as to why participants felt unable to be active were around body image and self-confidence. Other barriers to their physical activity were children and finding child care or free time to exercise and the fear of making medical conditions worse from physical activity.
- Recommendations have been formulated using the World Health Organisation's 20 actions as well as
  recommendations and guidance from Sport England, Public Health England and NICE combined with our
  findings from local data. They are intended to guide future work in Bristol. The sub headings of the 12
  recommendations include: Active travel, Campaigns and Resources, Children, Community Empowerment,
  Data, Facilities, Families, Leadership, Policy and Strategy, Professional Partnerships, Research and Guidance
  and Technology.

#### 3. Introduction

Bristol as a city has been summarised in three words as vibrant, diverse and friendly by those responding to the Quality of Life survey.

Bristol's population is increasing at a higher rate than other similar UK cities and there are many things that set Bristol apart and make it a place where an increasing number of people want to live, work and study. The city is home to a unique mix of cultures with at least 91 different languages spoken. It can also be seen as a city of contrasts where some of the most affluent areas border some of the most deprived. New problems are emerging such as travel congestion, environmental pollution and increasing house prices.

At the start of 2019, Bristol's One City Plan was published providing a short, medium and long term plan for Bristol. A shared vision is set out that by 2050 Bristol will be a fair, healthy and sustainable city and a city of hope and aspiration, where everyone can share in its success. The One City approach brings together partners from across local business, charitable, academic and public sectors to commit to jointly tackling challenges in Bristol (Bristol City Council, 2019).

This physical activity needs assessment project was managed by Public Health within Bristol City Council across three months in 2019.

The International, National and local policy, strategy and recommendation context was considered and quantitative data was analysed from sources such as the local Quality of Life survey, the Active Lives survey and Joint Strategic Needs Assessment data profile.

Data was gathered through existing feedback and research as well as gathering qualitative data from local people and a survey using Bristol City Council's Citizens Panel.

This intelligence was combined and analysed to offer an overview of physical activity in Bristol and recommendations for improvements.

#### 4. Health and Physical Activity

Exercise has been called a miracle drug (Pimlott, 2010) that can benefit every part of the body and substantially extend lifespan. Physical inactivity and smoking are the two major risk factors for non-communicable diseases around the globe. Of the 36 million deaths each year from non-communicable diseases, physical inactivity and smoking each contribute about 5 million (Wen & Woo, 2012).

1 in 4 people in the UK are inactive (defined as less than 30 minutes of moderate intensity physical activity per <u>week</u>). Inactive people visit the doctor more often and spend 38% more days in hospital than active people. The most significant health benefits are gained by an inactive person currently doing no physical activity starting to do even a little (Department of Health, 2011).

#### 4.1 Physical Health

Physical Activity contribution to reduction in risk of mortality and long term conditions

Disease	Risk reduction	Strength of evidence
Death	20-35%	Strong
CHD and Stroke	20-35%	Strong
Type 2 Diabetes	35-40%	Strong
Colon Cancer	30-50%	Strong
Breast Cancer	20%	Strong
Hip Fracture	36-68%	Moderate
Depression	20-30%	Moderate
Hypertension	33%	Strong
Alzheimer's Disease	20-30%	Moderate
Functional limitation, elderly	30%	Strong
Prevention of falls	30%	Strong
Osteoarthritis disability	22-80%	Moderate

Start Active, Stay Active (2011) based on US Department of Health and Human Services Physical Activity Guidelines Advisory Committee Report (2008), Washington D.C. Referenced by Dr Adrian Davis in his presentation at the Public Health and Sustainable Transport 2019

If the Chief Medical Officers Physical activity guidelines for physical activity were followed by everyone, it is estimated that 37, 000 deaths a year could be prevented in England alone (UK Active, 2014).

Physical inactivity is estimated as the principal cause for approximately:

- 21–25% of breast and colon cancer burden
- 27% of diabetes burden
- 30% of ischaemic heart disease burden (WHO , 2016)

Physical activity, has been proven with high level evidence to reduce the risk of:

- Type 2 diabetic complications and the need for medications by 30-40%
- Breast cancer by 20%

- Depression; inactive individuals have three times the rate of moderate to severe depression
- Dementia (Varney et al., 2014)

Physical activity has also been shown to impact on health-related quality of life (Bize 2007).

#### 4.2 Mental Health

Being active is important for our state of mind as well as the body; activity increases feelings of wellbeing, mental alertness and energy and linked to this, businesses with more active workforces are more productive (Varney, 2014).Compared to active people, inactive people have three times the rate of moderate to severe depression (Wayner, 1992).

#### 4.3 Health in Bristol

Considering the potential of physical activity to prevent and manage conditions at a more local level we briefly examined data for health indicators relating to these for the local population.

#### From the latest data from the Quality of Life survey 2018/19 we note that:

- 84% of respondents' report that they are in good health, 77% for respondents from the most deprived areas
- 20% of respondents report below average mental wellbeing, 28% for respondents from the most deprived areas
- 44.1% of respondents report that they are overweight or obese, 50.1% in deprived areas
- Morbid obesity 2.2%, with 5.9% in deprived areas and 7.5% amongst disabled respondents
- 19.7% reported below average mental health, 27.6% in deprived area and 40.7% amongst disabled respondents

## Breast and Colorectal cancer incidence in Bristol (number diagnosed in this time period) 2012-2016 (From the

National Cancer Registration and Analysis Services' cancer analysis system):

- 1, 654 Breast cancer cases
- 1, 134 Colorectal cancer cases

Diabetes and Coronary Heart Disease (CHD) prevalence in Bristol (number recorded as living with the condition in this time period) 2017-18 (from the NHS Quality Outcomes Framework data)

- 23, 038 people living with Diabetes or 1 in 18 of the local adult population
- 11, 643 people living with CHD or 1 in 45 of the local adult population

# Dementia prevalence in those aged over 65 in Bristol (number recorded as living with the condition in this time period) 2017- 2018 (from GP practice dementia register data, NHS Digital)

• 3, 177 people over 65 living with Dementia or 1 in 20 of those over 65 in Bristol

We can see that the Bristol population has much to gain from increasing physical activity levels.

#### 5. Policy, Strategy and Guidance

#### 5.1 International and National Guidance

The World Health Organisation (WHO) Global action plan on physical activity 2018–2030: more active people for a healthier world (2018) set out four strategic objectives which are applicable to all countries. These are:

- 1. Create active societies
- 2. Create active environments
- 3. Create active people

#### 4. Create active systems

At a national level Public Health England (PHE) issued guidance and recommendations in 2014 to promote and support Physical Activity in the population which was further update in 2017 (Varney et al. 2014; Varney et al. 2017). In this they recommend action across four areas which show commonality with those from WHO:

- Active society: creating a social movement
- Moving professionals: activating networks of expertise
- Active lives: creating the right environments
- Moving at scale: scaling up interventions that make us active

The 2015 Government document, "Sporting Future: A New Strategy for an Active Nation" outlines the key strategies to increase sports and physical activity participation.

The following key areas are covered:

- More people from every background, regularly and meaningfully:
  - o Taking part in sport and PA
  - o Volunteering, and
  - o Experiencing live sport
- Maximising international and domestic sporting success and the impact of major events
- Supporting a more productive, sustainable, and responsible sport sector
- Measuring the impact

Sport England (2016) further detail their strategy based on this government document.

#### 5.2 CMO UK Physical Activity Guidelines

#### Published September 2019:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/832868/ukchief-medical-officers-physical-activity-guidelines.pdf

The following briefly summarises the current guidelines:

#### Infants (less than 1 year):

•Infants should be physically active several times every day in a variety of ways, including interactive floor-based activity, e.g. crawling.

•For infants not yet mobile, this includes at least 30 minutes of tummy time spread throughout the day while awake (and other movements such as reaching and grasping, pushing and pulling themselves independently, or rolling over); more is better.

NB: Tummy time may be unfamiliar to babies at first, but can be increased gradually, starting from a minute or two at a time, as the baby becomes used to it. Babies should not sleep on their tummies.

#### Toddlers (1-2 years):

•Toddlers should spend at least 180 minutes (3 hours) per day in a variety of physical activities at any intensity, including active and outdoor play, spread throughout the day; more is better.

#### Pre-schoolers (3-4 years):

•Pre-schoolers should spend at least 180 minutes (3 hours) per day in a variety of physical activities spread throughout the day, including active and outdoor play. More is better; the 180 minutes should include at least 60 minutes of moderate-to-vigorous intensity physical activity.

#### Children and Young People (5 to 18 years)

•Children and young people should engage in moderate-to-vigorous intensity physical activity for an average of at least 60 minutes per day across the week. This can include all forms of activity such as physical education, active travel, after-school activities, play and sports.

•Children and young people should engage in a variety of types and intensities of physical activity across the week to develop movement skills, muscular fitness, and bone strength.

•Children and young people should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of not moving with at least light physical activity.

#### Adults (19 to 64 years)

•For good physical and mental health, adults should aim to be physically active every day. Any activity is better than none, and more is better still.

•Adults should do activities to develop or maintain strength in the major muscle groups. These could include heavy gardening, carrying heavy shopping, or resistance exercise. Muscle strengthening activities should be done on at least two days a week, but any strengthening activity is better than none.

•Each week, adults should accumulate at least 150 minutes (2 1/2 hours) of moderate intensity activity (such as brisk walking or cycling); or 75 minutes of vigorous intensity activity (such as running); or even shorter durations of very vigorous intensity activity (such as sprinting or stair climbing); or a combination of moderate, vigorous and very vigorous intensity activity.

•Adults should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of inactivity with at least light physical activity.

#### Older Adults (65 years and over)

•Older adults should participate in daily physical activity to gain health benefits, including maintenance of good physical and mental health, wellbeing, and social functioning. Some physical activity is better than none: even light activity brings some health benefits compared to being sedentary, while more daily physical activity provides greater health and social benefits.

•Older adults should maintain or improve their physical function by undertaking activities aimed at improving or maintaining muscle strength, balance and flexibility on at least two days a week. These could be combined with sessions involving moderate aerobic activity or could be additional sessions aimed specifically at these components of fitness.

•Each week older adults should aim to accumulate 150 minutes (two and a half hours) of moderate intensity aerobic activity, building up gradually from current levels. Those who are already regularly active can achieve these benefits

through 75 minutes of vigorous intensity activity, or a combination of moderate and vigorous activity, to achieve greater benefits. Weight-bearing activities which create an impact through the body help to maintain bone health.

•Older adults should break up prolonged periods of being sedentary with light activity when physically possible, or at least with standing, as this has distinct health benefits for older people.

#### 5.3 Bristol's One City Plan

Through the One City Approach Bristol will make a concerted effort with communities, families and individuals to make healthy choices the easy choice including through taking action to change the obesogenic environment, reducing harm from alcohol and tobacco and developing opportunities for people to be physically active.

The vision for the health and wellbeing theme in the One City Plan is that:

By 2050 everyone in Bristol will have the opportunity to live a life in which they are mentally and physically healthy.

This vision has three sub-themes:

- i. Mental health will be as important as physical health in Bristol
- ii. Inequalities will be reduced
- iii. Bristol communities will be resilient with individuals being as independent as possible

#### 5.4 Bristol City Council Corporate Plan

Bristol City Council's overarching vision is set out in the Corporate Plan. The council plays a leading role in driving a city of hope and aspiration where everyone can share in its success. There is a strong commitment to building a better Bristol that includes success for everyone in the city and the council work alongside many other local, regional and national organisations to take care of the economic, social and environmental wellbeing of Bristol.

The Council's vision is based on the core principles of developing people and places to improve outcomes, empowering communities and reducing the need for council services. These principles will be applied through a number of actions including:

• Planning inclusively with everyone in mind, but with a particular focus on our children and their future.

• Focussing on planned long-term outcomes not short-term fixes; prioritising early intervention and prevention.

Aspiration and equality lie at the heart of the Mayor's vision for building a better Bristol, and in Bristol's corporate strategy are detailed seven key commitments including that:

• Bristol will be a leading cultural city, making culture and sport accessible to all.

The Council's annually revised corporate business plan sets out actions to support delivery of this key commitment through commissioning and supporting sport and physical activity programmes and facilities across the city.

Across the international, national and local Policy, Strategy and Guidance, themes of active societies and environments are consistent and these will help facilitate the individual recommendations from the CMO.

#### 6. Indices of multiple Deprivation

Data in this document has been disaggregated to better understand inequalities in physical activity levels across the city, including by deprivation decile. The Indices of Deprivation 2015 combine a number of indicators covering a range of economic, social, environmental and housing issues, into a deprivation score for each small area in England.

The Ministry of Housing, Communities and Local Government will publish new 2019 English Indices of Deprivation by the end of October 2019.

The map below shows the areas of highest multiple deprivation. Ward boundaries changed in 2016 and now 17 of the 34 current wards contain lower super output areas (LSOA) which are ranked as within the 10% most deprived in the country. These areas are shown in the darkest colour on this map and correspond to areas within the following current 17 wards: Ashley, Avonmouth and Lawrence Weston, Central, Filwood, Frome Vale, Hartcliffe and Withywood, Hengrove and Whitchurch Park, Hillfields, Knowle, Lawrence Hill, Lockleaze, Southmead, Southville, Stockwood, Windmill Hill.





#### 7. Active Travel

https://www.gov.uk/government/statistics/walking-and-cycling-statistics-england-2017

Sport England have recently published an evidence review on active travel and physical activity (Calvill et al. 2019) and we know active travel activities such as walking and cycling make a valuable contribution to overall activity levels.

Bristol Transport Strategy has been consulted on and is due for publication in 2019. Further to this walking and cycling strategies are planned for the city. The West of England Combined Authority (WECA) area which includes Bristol as well as our neighbours Bath and North East Somerset and South Gloucestershire have also produced a Draft Joint Local Transport Plan 4 2019-2036.

With these comprehensive pieces of work underway, this section will briefly cover the data.

#### 7.1 Cycling

National data on cycling for travel is gathered via a number of sources.

The following graph shows the percentage of respondents to the Sport England Active Lives survey 2017/18 who report having cycled for travel in the last 28 days.



We can see from this that at a national level, there are differences between male and female respondents with the latter far less likely to report they have cycled for travel in the last month. The figure for Bristol respondents compares favourably with that for England with 19% reporting they had cycled for travel in the last 28 days.

The local Quality of Life survey gathers data on cycling to work and is shown on the following graph by equalities groups.



From this data source we see that 15.9% of respondents report that they cycle to work. However there are significantly lower levels reported amongst respondents from the groups: Female, Carer, Disabled, 50 years and older, 65 years and older and Religion or faith. The categories of Male and Religion or faith have significantly higher levels.

The following graph is from the same data source and shows the Bristol cycling to work data broken down by deprivation decile.



Looked at by level of deprivation, we see that respondents from the most deprived 10% of areas in Bristol are far less likely to report that they cycle to work.



The most recent census data is from 2011 and the above map shows the percentage of employed respondents who report cycling to work, by ward.

From this we can see that there is variation across Bristol with residents in some of the wards in the South of the city reporting very low levels of cycling to work compared to the city average.

Pupil Voice (2018) data for cycling levels for children and young people shows that for primary school children 34% of boys and 28% of girls cycle at least once a week. For males, the percentage appears to rise as they get older with 38% of males in secondary school cycling at least once a week. However, just 17% of young women and girls in secondary school reported that they cycle to school.

Sustrans Bike Life report (2017) showed that 60% of Bristol households have access to a bike yet only 25% of residents cycle at least once a week with 12% cycling at least 5 times a week. This report also showed that 10% of workers travel to work by bike in Bristol and 58% of Bristol residents' cycle trips are for work or education.

#### 7.2 Walking

The following graph shows the percentage of respondents to the Sport England Active Lives survey 2017/18 who report having walked for travel in the last 28 days.



We can see from this that at a national level, there is a difference between male and female respondents with the latter slightly more likely to report they have walked for travel in the last month. The figure for Bristol respondents compares favourably with that for England with 44% reporting they had walked for travel in the last 28 days.

The local Quality of Life survey gathers data on walking to work and is shown on the following graph broken down by equalities groups.



20.2% of respondents in Bristol reported walking to work. Whilst there is some variation across equalities groups, the only significant variation is for Disabled respondents (lower than Bristol average) and 16-24 year (higher than Bristol average).



Looking at walking to work by deprivation decile as seen on the above graph, we see that those from the 2<sup>nd</sup> most deprived decile are significantly less likely to report walking to work and those from the sixth most deprived are significantly more likely to report this.

The most recent census data is from 2011 and the following map shows the percentage of employed respondents who report walking to work, by ward.

From this we can see that there is variation across Bristol with some of the outer areas of the city showing far lower levels of walking to work amongst their employed residents.



#### 8. Physical Activity Data for adults

This section explores the data which monitors compliance with the Chief Medical Officers' physical activity recommendations for adults. The recommendations for adults of 18-64 cover three main elements:

- Moderate to Vigorous Physical Activity (MVPA)
- Muscle strengthening
- Reducing sedentary time

The guidelines for adults of 65 and over have an additional recommendation to include balance and coordination exercises if they are at risk of falls.

However, data gathered almost exclusively attempts to monitor MVPA only and this extends to adults being described as meeting the guidelines simply through reporting compliance with this element.

A narrative review of current surveillance measures are examined in a recent publication (Strain et al. 2019).

The Chief Medical Officer (CMO) defines an inactive person as someone who does not achieve a total of 30 minutes of moderate intensity physical activity per week. Thus in the data reporting the terms "inactive" and "inactivity" refer to this.

In the Quality of Life Survey, those who meet the MVPA recommendation part of the CMO guidelines are described as those "who do enough regular exercise"

The following data on physical activity is from the following sources:

- Sport England Active Lives Survey 2017/18
- Quality of Life survey 2018/19

#### 8.1 Physical Activity and Inactivity in Bristol



The above graph shows Active Lives data for the percentage of inactive respondents in Bristol compared to those across England and the trend over the last few years. This data suggests that levels of inactivity compare favourably to national levels with Bristol consistently showing lower percentages of inactive respondents. However, inequalities exist across Bristol populations and examples of data which show this follow.

The following map shows the areas of highest percentage of inactivity reported by respondents at Medium Super Output Area (MSOA) as surveyed through Sport England Active Lives.

### Percentage of inactive adults aged 16+; Bristol MSOAs 2017/18. Source: Active Lives, Sport England



With the darker areas showing the higher percentage of inactive residents on the above map, there is noticeable correspondence with the areas of highest deprivation in Bristol.

Data gathered through the local Quality of Life survey also shows this correlation between those in the most deprived 10% and lower levels of activity. The following graph shows the percentage of respondents who reported they "do enough exercise" (meet the MVPA part of the CMO recommendations) with the Bristol average expressed as a dark line. The Bristol average from this data source is 66.1% with the percentage for those living in the most deprived areas significantly lower at 56.4%



Data from the Quality of Life Survey on those playing Sport shows that respondents from the most deprived areas of Bristol were less likely to report they were engaged with sport at least once a week at 36.2%. For those in the least deprived areas, the percentage was far higher with over half reporting they play sport at least once a week, as shown on the following graph.



Further analysis of data from the Quality of Life survey reveals differing variations apparent. The following graph shows this data by equalities group for respondents recorded as "do enough regular exercise each week".



There is some variation between different equalities groups with some showing statistical significance.

The following categories have significantly lower percentages who report they do enough regular exercise each week compared to the Bristol average:

- 50 years and older
- 65 years and older
- Disabled
- Religion or faith

Those categories which show significantly higher levels than the Bristol average are:

• No religion or faith

Female respondents report significantly lower levels than males although the figure is broadly similar to the Bristol average.

#### 8.2 Physical Activity and Inactivity – Equalities groups England

Sport England Active lives data is also available by equalities group at National Level and shows that males report being significantly more active than females and the following graph illustrates this.



For ethnic groups, data at a national level is available in more detail than at local level and shows differences between different groups.

The following graph suggests that respondents described as the following were more likely to report being inactive:

- South Asian
- Black



Data by sexual orientation at a national level shows that Gay, lesbian and bisexual respondents are significantly more active than those who identify as heterosexual.



National data for physically activity levels by age give more detail across the adult life course and show that respondents aged 16 to 54 are more likely to report being active than average, with those aged 16 to 24 reporting as the most active age group. This data suggests a decline in physical activity levels as people age, with the percentages for the 75-84 group showing a higher level of respondents reporting being inactive (47.2%) than active (39.2%). For those aged 85+, the majority report being inactive (70.2%) with a minority as active (18.8%).



Looking at activity vs inactivity for those with life limiting disability at a national level, the following graph shows the data from the Active Lives survey. Those with a life limiting disability are less likely to report being active (44.8%) compared to those with no life limiting disability (67.42%). Those with more impairment are more likely report being inactive with 51.0% of respondents with three or more impairments reporting this.



The following graph shows the Active Lives data by religion and as with local data shows that respondents identifying as having no religion have higher levels of activity and lower levels of inactivity than those who identify as being religious. There is some variation of reported levels of activity and inactivity across the different religious groups.



#### 8.3 Sedentary Behaviour England and Bristol

There is less monitoring of sedentary behaviour locally and nationally than for MVPA levels. The Health Survey for England previously monitored this, but the topic was last covered by the survey in 2016; we have therefore used this as the most recent national data for this section. We also included a question on sitting time in our local survey via Citizens' Panel and we have presented analysis of this.

The following four graphs show the Health Survey for England 2016 data on sitting and sedentary behaviour for the following:

- Average number of hours spent sitting on a weekday and weekend by age group
- Average number of sedentary hours on a weekday, by gender and age
- Average number of sedentary hours on a weekend day, by gender and age
- Average number of hours sitting or standing at work by gender and age group



The above graph suggests that the number of hours spent sitting increases from age 25 onwards. Higher levels of sitting were reported for those in the 16-24 age group compared to those aged 24-64 with the highest levels in the 75+ category. For respondents in the 16- 64 age groups there is an increase in sitting time at weekends compared to that on weekdays. For respondents in the older age groups of 65- 74 and 75+ the time spent sitting is similar for weekdays and weekends.

The following graph shows sedentary hours reported by respondents on weekdays only, shown by gender and age.



The above graph suggests a difference in sedentary hours by both gender and age with female respondents reporting less sedentary time across age groups up to 75. At 75+ the reported sedentary time by gender changes and females report more sitting time than males. This graph also suggests less time sitting for those 25-54 age groups.

The following graph shows sedentary hours reported by respondents on weekends only, shown by gender and age.



This graph shows a similar gender difference with females reporting less sedentary time than males across all ages up to the 75+ category. When compared to the reported times for weekdays, there is an increase in reported sedentary time for age groups 16-64. For the 75+ age group the difference in reported sedentary time by gender is slightly different compared to weekdays with males and females reporting the same amount.



The following graph looks at average number of hours spent sitting or standing at work only, by gender and age.

Across all ages, women reported less time standing or sitting at work than men. On average women aged 35 to 64 reported statistically significantly less time sitting and standing at work. The highest number of hours sitting or standing was reported by male respondents in the 35-44 age group and the lowest for women in the 65-74 group.

Comparing the above graph to the first three graphs we see a different pattern across ages with those in the 16-24 age group reporting less time sitting or standing at work than the 25-54 groups.

Overall the data from this survey found that the average total sedentary time is 4.7 hours on a weekday and 5.1 hours on a weekend day.

The following graph shows results to a question on a survey we carried out via Citizens Panel in Bristol which was completed by 716 people. Further detail on who responded to this survey will be given in a later section however;

we would caution that some equalities groups are represented by a very small number of local respondents and this should be taken into account when applying this to the Bristol population.

The average time reported spent sitting from this data source was 6.4 hours.



The data on the above graph shows that respondents from the following categories have reported over 7 hours of time spent seated on a typical day:

- 16-24 year olds
- 25-49 year olds
- BAME
- LGB
- 1- Most Deprived

There are some similarities with the HSE 2016 national data including that females report less time seated and 16-24 year olds report more time seated than most age groups. However there are differences between this local data

compared with the national data. These include that older respondents in the Citizens' Panel survey reported less time sitting than those in the younger groups locally whereas national data showed more sedentary time reported by respondents in the 65+ category compared to those in the younger categories ( apart from at work).

#### 9. Physical Activity data for Children and Young People

This section is explores the data which monitors compliance with the Chief Medical Officers' physical activity recommendations for children and young people aged 5-18 years old. The recommendations cover:

- Moderate to Vigorous Physical Activity (MVPA)
- Vigorous intensity activity and muscle strengthening
- Reducing sedentary time

Data gathered almost exclusively attempts to monitor MVPA only and this extends to children being described as meeting the guidelines through reporting compliance with this element only.

A narrative review of current surveillance measures are examined in a recent publication (Strain et al. 2019).

The Chief Medical Officer (CMO) defines an inactive person as someone who does not achieve a total of 30 minutes of moderate intensity physical activity per week. Thus in the data reporting the terms "inactive" and "inactivity" refer to this.

The following data on physical activity is from the following sources:

- Active Lives children and young people survey 2017/18
- Pupil Voice 2018/19
- What about YOUth 2014/15

Active Lives Children and Young People 17/18 national survey has approximately 110,000 respondents of which 344 were pupils from Bristol schools. This small sample size should be considered when viewing the data.

#### 9.1 Physical Activity Levels Bristol Children and Young People



The above graph shows that, of the respondents to the Sport England 2018 Active Lives Children and Young People Survey nationally, 17.5% reported that they meet the CMO guidelines of 60 minutes of moderate to vigorous physical activity per day, every day. Of the Bristol respondents, 15.7% reported they meet the guidelines. The graph also shows the percentages for responders in the core cities with the figures suggesting that activity levels for this age group in Bristol are higher than those in three of the other cities and lower than in two.

The What About YOUth (WAY) survey 2014-15, estimated that every day 17% of Bristol's 15 year olds take part in at least an hour of physical activity. This is significantly higher than the national average of 13.9% from this data source.

The local Pupil Voice survey conducted in 2018 with over 6000 local children and young people, asked a number of questions relating to physical activity.

Analysis was performed on the following question to help us understand the results:

"On how many days in the last week were you active for at least half an hour and enough to breathe harder and faster or feel hot and sweaty? Examples of these activities would include cycling, dancing, trampolining, swimming, playing active sports etc."

The following two graphs help us to understand the responses to this question.



The above graph shows the percentage of respondents who reported that they are active at this intensity and duration on every day of the week by age and gender.

From this we can see that there is a gender difference with percentages of female respondents reporting that they are active at this level lower than males across all ages. The percentages that report this level of activity is lower for older year groups than for younger. The highest percentage age and gender group who report this level of activity are Year 4 males with 37.7% responding that they are active at this intensity and frequency. The lowest percentage age and gender group reporting this level of activity is Year 10 females with just 7.8% reporting this intensity and frequency of physical activity.



The above graph gives us further insight into differences in response to this question by equalities group. With some of the equalities groups having very small number of responses, we can only attach a statistically significant variation from the average to those categories shown in the darker colour.

From this we can see that primary school respondents were significantly more likely to report that they are active at this level and that secondary school respondents were significantly less likely to report this intensity and frequency.

Female respondents were significantly less likely to report this level of activity and males significantly more likely.

#### 9.2 Barriers to Physical Activity for Bristol's Children and Young People

Reponses from secondary school pupils to a question on the Pupil Voice survey regarding barriers to doing more physical activity were analysed. The following graph shows these responses by gender for years 8 and 10.



Not shown on the graph is that just over half (51%) of male respondents answered that they were as physically active as they want to be with 28% of females giving this response.

A higher percentage of female responders gave "not having enough time" (36.2%) than responded that they are as active as they want to be (28%). A far lower percentage of male responders gave this as a reason they were not active (20.4%). 27.8% of female responders gave being shy about doing things in front of other people as reason they are not as active as they would like compared to 12.8% of boys. In addition far more female responders indicated they were shy about how they look (20.2%) than boys (6.3%).

#### 9.3 Walking data for Bristol Children and Young People

Reponses from secondary school pupils to a question on the Pupil Voice survey regarding time spent walking on the previous day were analysed. The following graph shows these responses by duration for years 8 and 10.



This graph shows that the majority of respondents (75.8%) answered that they walked for at least an hour on the day previous to the survey with only 24.2% reporting walking duration of less than an hour or no time at all.

The following graph shows the data by equalities group.



The above graph shows that the average time reported from secondary respondents on the previous day was 122 minute, just over 2 hours. If this was replicated on every day of the week it suggests that the average respondent would meet the CMO MVPA recommendation.

There is some variation amongst equalities groups with respondents categorised as Black/ Black British and Asian/ Asian British reporting lower average time walking.

#### 9.4 Sedentary time data for Bristol Children and Young People

Limited data is available on sedentary time for children and young people.

The Pupil Voice survey 18/19 asked Bristol pupils about their screen time usage for separate activities and the responses to this for those who reported over three hours for any one activity are detailed on the following graph by gender and stage.



Most noticeable from this data is that 42% of male respondents to this survey from years 8 and 10 reported over 3 hours playing games on a screen. 37% of male respondents from years 4 and 6 also reported they spend over 4 hours playing games on a screen. 35% of female respondents in years 8 and 10 spent three hours or more using social media.

However, with all of these screen activities available on mobile devices such as smart phones and tablets and with some involving possible activity as part of them e.g. gaming which involves physical movement, we cannot be sure that this gives an indication of sedentary behaviour.

Data was analysed from the national "what about YOUth "survey 2014/15 for those respondents who report an average daily sedentary time of 7 hours or more.



From the above graph we can see that locally, 69% of respondents report a daily average sedentary time of over 7 hours compared to a similar national percentage of 70.1%.

#### **10. Local Facilities**

Bristol has a broad range of physical activity provision.

Elite provision includes Ashton Gate Stadium, the Gloucestershire Cricket ground and the Memorial Ground, home to Bristol Rovers.

Bristol has a 50 meter Olympic size swimming pool, 150 station gym, sports hall, climbing wall and healthy living zone at Hengrove Leisure Centre. There is a 6 lane athletics track at Whitehall in Central Bristol and the floodlit eight lane AAA accredited competitions athletics facility at the WISE campus in Filton. The City of Bristol Gymnastics Centre located in Hartcliffe, the indoor tennis centre at Coombe Dingle, numerous climbing centres, an indoor bowls centre and half a dozen water sport facilities.

Bristol schools have seen considerable investment over the past 15 years and there are now a number of dual use sports facilities which utilised by both pupils and the community.

In total there are 222 individual indoor and outdoor sports facilities in the Bristol area:

- 3 stadia, with total capacity of approximately 50,000 spectators
- 10 cycle and wheel parks
- 3 athletics tracks and arenas
- 4 golf courses
- 3 gymnastics centres
- 40 health & fitness centres
- 1 indoor bowls club
- 3 indoor tennis centres
- 19 multi-use games areas (MUGAs)
- 25 outdoor bowls greens
- 42 outdoor tennis facilities
- 37 sports halls
- 10 squash centres
- 21 swimming pools
- 6 watersports facilities

Bristol has over 500 outdoor sports pitches:

- 173 adult football pitches
- 22 artificial rubber-based pitches
- 27 artificial sand-based pitches
- 2 artificial water-based pitches

- 15 artificial cricket wickets
- 48 cricket pitches
- 70 junior football pitches (mini)
- 55 junior football pitches (youth)
- 4 junior rugby pitches
- 82 adult rugby pitches

Sports pitch provision is owned and managed by a number of different providers ranging from education, universities, third sector, trusts and professional clubs. The Council is the largest single provider of grass pitches the majority of which are in Bristol's parks and open spaces.

There are two adult Park runs and three junior Park runs delivered across Bristol's parks and a number of pieces of outdoor gym equipment and fitness trails located in open spaces.

There are a wide range of targeted interventions that address the needs of priority groups. A few examples are:

- Dementia friendly swimming
- A range of women's only activities promoted through Bristol Girls Can
- Free courses to help people start running including Walk to Jog and Zero to 35

Other sectors compliment main stream provision by delivering physical activity interventions targeted at priority groups in community centres and other informal spaces. For example Bristol City Community Trust walking football, a slower, low impact version of Football. ACE Neighbours is delivered by St Monica's Trust; a peer volunteering project that matches an isolated older person (65 plus) with an older volunteer (60 plus) to support them to get out and try new activities in their local area.

Routes into exercise are also available through the physical activity referral programme. The referral programme is for people who are inactive or have a low to medium risk health condition and who meet certain criteria. Referrals are made either through an individual's GP, practice nurse, physiotherapist or hospital consultant.

Further programmes for those with specific medical conditions are also available including pulmonary rehabilitation, Better Breathing, Healthy Hearts, Energise Cancer rehabilitation, Parkinson's and Stroke referral programme, Life Balance (for people with MS), Dementia friendly swimming and Staying Steady strength and balance classes.

There are also a number of local projects focused on social prescribing for physical activity including those in Hartcliffe and Withywood, Filwood and Lawrence Hill.

From this brief overview we can see a wealth of sport and physical activity facilities and programmes available to the Bristol population.



Attendance at Bristol's Leisure centres has been rising steadily over the last five years as the above graph of attendances shows.

#### **11. Citizens Panel Survey**

The Citizens' Panel is an online group of people from across Bristol who regularly share their views on a wide range of issues to let the council know how to improve services and make the city an even better place to live. Established in 1998 this is one of the longest running Citizens' Panels in the country and the largest group the city council regularly engage with.

Given the time frame for this needs assessment, we felt that the citizens panel was the best way to gather additional data on physical activity locally and during May - June 2019, colleagues in the Insight, Performance and Intelligence department within Bristol City Council conducted a survey on our behalf and performed analysis on it.

#### 11.1 Who Completed the Survey?

Given what we already knew about differing levels of physical activity in our Bristol populations, we requested a demographic summary of the survey responses.

At the time of the survey the Citizen's Panel consisted of 1, 123 residents of Bristol and 716 members completed our survey giving a response rate of 63.8%.

#### **Deprivation Decile**

The top 5 'least deprived' areas of Bristol gave 62.5% of the response with 16.1% of the respondents coming from the Bristol's 10% least deprived area.

#### Age group

- 70.3% of the survey respondents are aged under 65 years
- 28.8% were aged 65 or older

#### Gender

- 51.7% Female
- 47.0% Male
- 0.4% said they were Transgender

#### Long-term limiting illness

• Overall, 9.5% of all respondents said they had a long-term limiting illness

#### Ethnic background

- 4.9% came from a BAME background, including:
  - o 1.3% Asian or Asian British descent
  - o 1.1% Black or Black British descent
  - o 2.1% Mixed descent
  - o 0.4% Other Ethnic groups
  - 92.6% came from a White background including 9.9% from a White other, with:
    - o 1.3% White Irish descent
    - o 1.1% Eastern Europeans (Polish and Non-Polish descent)
    - o 0.1% Gypsy (including English, Scottish and Roma Gypsy) or Irish Traveller

#### **Sexual Orientation**

- 6.7% said they were Lesbian, Gay or Bisexual
- 86.0% said they were Heterosexual

#### by Religion

- 41.5% belong to a faith group
- 55.1% said they did not follow a religion

#### by Ward

• The members come from all 34 wards across the city and the highest response came from Westbury-on-Trym & Henleaze with 9.1%.

#### **11.2 Results from Multiple Choice Questions**

• Question - How would you describe how much physical activity you do, where you feel breathless and sweaty but this would not include doing housework or DIY?

How much physical activity do you do, where you feel breathless and sweaty (not including housework or DIY?)



- Question Thinking about your answer to Question 1, do you feel that this is:
  - Enough
  - $\circ$  ~ I would like to do more
  - I don't know



• Question - How often do you do something to improve your strength like carrying heavy items, weight training or yoga for at least half an hour?

	Percent	Count
Once a week	56.4%	359
Twice a week	20.8%	132
Three times a week	11.8%	75
Four times a week	4.6%	29
Five or more times a week	6.4%	41

• Question - What types of activities would you participate in if they were available in your neighbourhood? (people could select more than one option)

	Percent	Count
Walking	65.1%	419
Swimming	39.3%	253
Gardening	30.4%	196
Dancing/ keep fit or gymnastics	28.6%	184
Cycling	28.3%	182
Running	17.7%	114
Ball games	11.6%	75
Organised games/activities outside	9.6%	62
Horse riding	<b>6.7</b> %	43
Martial arts like judo, karate or boxing	5.7%	37
Roller skating, scootering or skateboarding	3.6%	23
Other (please explain)	17.4%	112

#### • Question - What limits you from doing more physical activity? (people could select more than one option)

The top five most popular responses were:

- 1. Time 42.8%
- 2. I am as physically active as I would like to be 27.3%
- 3. Work Commitments 21.9%
- 4. Physical Disability 15.5%
- 5. An injury 13%

As this question was given a great number of options - these have been combined to better present the findings.

New sub-category Response	se Original option Percent		Response
			Total
Cost	I don't have the right clothes	1.6%	11
	Money / cost	13.3%,	91
Lifestyle	Carer responsibilities	7.2%	49
	Caring for children	12.4%	85
	Work commitments	21.9%	150
	Time	42.8%	293
	Commuting	5.7%	39
	Cultural restrictions	0%	0
Facilities	Lack of changing facilities	0.7%,	5
	Nothing near me,	11.7%	80

Medical/ Disability Learning disability		0.1%	1
	Physical disability	15.5%	106
	I'm worried that I might	11.8%	81
	make a medical problem		
	worse		
	Mental health issues	4.4%	30
	An illness	8.9%	61
	An injury	13.0%	89
	I don't like my heart beating	1.2%	8
	fast		
	Being hot and sweaty scares	1.8%	12
	me		
Outdoor Conditions	Weather – rainy	11.3%	77
	Weather – too cold	4.7%	32
	Weather – too hot	2.8%	19
	Dark evenings	8.5%	58
Confidence	I am not confident in my		
	body (how it looks)	3.9%	27
	I don't feel confident I don't	7.3%	50
	have anyone to go with I	9.9%	68
	haven't found something I		
	enjoy	9.8% ,	67
Don't want to	I am as physically active as I	27.3%	187
	would like to be		
	Can't see a good reason to	0.7%	5
	exercise		
	I don't enjoy being active	7.2%	49
Other (please describe below)		9.5%	65

#### These subheadings were then used to create the following table

	Percent	Count
Lifestyle	33.7%	616
Medical/ Disability	21.2%	388
Don't want to	13.2%	241
Confidence	11.6%	212
Outdoor conditions	10.2%	186
Cost	5.6%	102
Facilities	4.6%	85
Other	9.5%	65

• Question - What would help you do more physical activity? (people could select more than one option)

	Percent	Count
A group with similar interests to me	38.5%	248
Activities with friends	31.4%	215
Activities with my baby	19.2%	6
Activities with my children	15.5%	53
An online community to motivate me	8.4%	41
Having goals/challenges/ events to aim for	6.7%	136
Inspiring messages through social media	6.7%	10
Seeing more positive images of "people like me"	4.2%	53
Technology – a tool to track my progress	1.3%	54
Weekday/daytime activities	0.8%	126
Other (please describe below)	25.1%	149

• Question - Thinking about yourself and the benefits of being more active, which of the following are important to you?



• Question - How much would you be prepared to pay for an activity session?

	Percent	Count
Nothing	13.4%	95
Up to £3	16.7%	118
Between £3 to £5	40.5%	286
Between £5 to £10	19.1%	135
Would pay more depending on the session	10.3%	73

• Question - On a typical day, how much time do you spend seated? (in a car, on a sofa, watching tv, sitting at a computer)



	Percent	Count	Cumulative Percent
up to about 4 hours	30.2%	216	30.2%
between 4 to 8 hours	<b>45.0</b> %	322	75.2%
between 8 to 12 hours	21.7%	155	96.9%
between 12 to 16 hours	3.1%	22	100.0%

#### 11.3 Analysis of free text responses

• Question - Please tell us anything else you would like to on the topic of physical activity, including anything you would like to add to your answers.

390 respondents commented which is 54.5% of everyone who completed the survey.

Simple thematic analysis was performed on these comments and identified the following themes:

- 1. Built environment, pollution, motor vehicles, walking and cycling
- 2. Older people, medical conditions and disability
- 3. Facilities and activities
- 4. Allotments and gardening
- 5. Cost
- 6. Ideas and suggestions
- 7. Women
- 8. Parks
- 9. Feedback on survey itself
- 10. Travel
- 11. Technology
- 12. Healthy eating and weight management

Of these, the first two covered the highest prevalence of the comments and further analysis was performed which we detail here.

#### Built Environment, pollution, motor vehicles, walking and cycling

Respondents highlighted how improvements to the environment would help them to be more active outside and concerns about pollution and air quality were raised:

I find that air pollution is increasingly a real barrier to me exercising in my neighbourhood. There are limited routes that avoid main roads. I used to just avoid rush hour but now I can feel it in the air and it puts me off of walking, running and cycling.

Please, reduce the vehicle emissions in Bristol. On days with little or no wind, the city becomes polluted with aircraft, train and vehicle emissions. The school run, and driver only vehicles are an affront to our need for clean air. Disgusting!

Other issues were raised around the built environment and some were linked to specific medical conditions or limitations.

More street lights to make it easier to exercise outside in the evening during winter

I enjoy walking and used to walk every day but I have cut down a lot because of the poor maintenance of the area in which I live, which is covered in graffiti. I have minor mental health problems and find walking around the area does not improve my mood anymore because I don't feel safe. The area looks run down and dirty and you assume that there is crime around which scares me. I prefer for my partner to drive us to another area which is more pleasant to walk around like Portishead, Weston etc.

> Council should do MUCH MORE to encourage walking - this is the simplest way to get many people more active. E.g. improving street environment by removing illegally parked cars, better pedestrian crossings that work quicker, wider pavements that are less cluttered. Also enforce speed limits, traffic-light jumping, and noise levels of cars and motorbikes. More trees, cleaner streets

Some respondents were keen for there to be less priority given to cars and motor vehicles:

Physical activity has huge benefits for both the individual and society – yet we have engineered an obesogenic environment through our leisure activities, our work and our built environment (half of all city space is effectively to cars and motor transport, despite most sitting idle for 95% of the time).

> Making car traffic routes less of a priority within towns and cities, and setting up more well signposted cycle/runners routes between towns and cities would encourage me to be more active outdoors.

#### Cycling

Some respondents explained that they cycle already or would like to:

I would like to try and ride an electric bicycle

I am fortunate in that I am retired, in good health, and have time to give to volunteering work and to my interests. Cycling is the best way for me to travel around Bristol and keep fit at the same time

> I cycle a lot for commuting, so I don't feel I need more exercise for fitness, but if I had time it would be nice to do other things for fun and relaxation.

People reported facilitators for cycling such as showers at work:

I am lucky to work somewhere that promotes sustainable travel so we have an excellent cycle lockup, showers, towels and hairdryers

There was also an understanding that although the individual respondent may cycle, friends and family felt less confident:

I cycle regularly into and around Bristol to go to places where I work as a volunteer. I only use the car rarely e.g. to go to the supermarket . My friends say they would like to cycle in the city but are nervous and are put off by heavy traffic and few dedicated cycleways.

Some respondents explained that they would like to cycle more but feel unable to because of safety concerns:

I would like to cycle more but the roads are too dangerous where I live; also too hilly in every direction.

Please make cycling safer - the roads are too dangerous - it puts most people off cycling.

A number requested more cycle infrastructure:

More cycle paths would encourage people to cycle to and from work.

And any more cycle routes are always welcome.

More cycle paths would make cycling as a family easier.

And a number of people were unhappy about pedestrians and cyclists sharing space:

Please make shared cycling pedestrian paths less hazardous for pedestrians with a campaign to make cyclists more considerate. Many cyclists are fine, But on every single walk at least one cyclist will race past at top speed with no warning. It's very alarming and off-putting

Walking in Bristol on paths shared with cyclists isn't safe as cyclists don't use or often even have bells. I have had some near escapes while walking around the harbourside.

I am a fairly active 70 year old. I would do more cycling but not happy in Bristol traffic.

Cycling in Bristol doesn't feel safe due to attitudes of car drivers and the huge lack of cycle paths. Get the cyclists off the pavements.

Respondents made suggestions to help more people cycle:

We need to make sure that it is as easy as possible for people to build activity into their daily lives as possible, so it doesn't feel like a chore. The easiest way to do this is to make it as easy as possible to cycle and walk for travel and for leisure. Investment in this would pay for itself many times over in reduced health and environmental costs"

Just a couple of miles by foot or a few more by bike would give people the recommended 30 minutes of physical activity they need everyday. We should have streets and neighbourhoods designed for people to get around easily - not centred on motor vehicles.

Making car traffic routes less of a priority within towns and cities, and setting up more well signposted cycle/runners routes between towns and cities would encourage me to be more active outdoors. The Bristol to Bath cycle path is a fantastic resource. I believe it allows those who are rightly worried of cycling on our busy pollution filled roads to cycle into and out of Bristol City Centre for work. I am aware it was created from a disused trainline and these aren't to be found in great numbers around Bristol but I think it teaches a valuable lesson when new cycle paths are being designed. They will be far more successful if they are built away from roads. They will get more people cycling and breathing less harmful exhaust fumes.

#### Walking

A number of respondents explained that they already walk with some unsure if this type or level of exercise meets the guidelines:

My walk to work is significant I think. 1/2 hr each way. I do a lot of dog walking (on my own, with friends and for a Rescue Centre and Cinnamon Trust) which does not seem to meet the definition of physical activity. I average 13000 steps a day on Fitbit.

I walk a lot... over 10,000 steps per day without getting breathless or sweaty, but this doesn't seem to be a type of physical exercise that counts in your survey.

Walking all over the country is my passion now I have retired.

Some mentioned issues which they have with walking in Bristol and reasons why they don't do more:

Sorry to bang on about walking, but I do think it's over looked in Bristol. I think if drivers and cyclists were both kept off pavements that would at least be a start - especially on school runs. I know of many parents who drive the short distance to school as they don't feel safe on the roads and this could easily be rectified as it is only from a handful of drivers and cyclists who break the rules. Around BS4 many streets you are forced to walk in the road as a pedestrian also there are many points where cyclists whizz along the pavement, with really small kids this is lethal

I enjoy walking around my neighbourhood and the city in general, but footways are often blocked and cluttered. I'm aware that I am breathing in poisonous air.

To encourage walking we should give more priority to pedestrians:

- increased width of pavements
- cleanliness of pavements and attractiveness

- streets free of tagging so are not intimidated by surroundings, important to keep older people walking

- longer green walk phases on crossings etc.

There was also mention of what helps people walk more:

Delighted that my employer offers showers - I wouldn't be able to walk to work if they didn't. This is a huge benefit.

#### Older people, medical conditions and disability

Some respondents who were older and/or Disabled felt that this meant they were not able to exercise, or exercise as much as before:

Apart from COPD/Arthritis, I am active most times/most days. I need medical care more than more activities. Suffer from back pain and it is better if I don't overdo it.

Older people generally find that the day to day business of living housework, shopping, social activities, visits to hospitals and health centres, gardening etc. - take up all the time and energy that they have. I think the age of respondents may be relevant in discussing this topic and possibly the nature of any physical disability - I'm 72 and, although I try to walk as much as possible, am restricted because of arthritis

After recent hysterectomy I have to be careful what activity I do.

My engagement in physical activities is seasonal (outdoors more in the summer months), and depends very heavily on my menstrual cycle: I have 2 weeks of every month where I am in pain, exhausted and suffer from social anxiety & depression. These symptoms of PMDD are likely to cause me to not want to partake in any physical activities.

Some suggested that specific advice from professionals would help them or others:

I'm currently recovering from major surgery, there is no NHS support post operation, it would be wonderful if I could find a group in my community who could support me with professional knowledge of recovery. A medical assessment to make sure any exercise is appropriate to my condition and likely to benefit me

More street lights to make it easier to exercise outside in the evening during winter. I suffer from depression; it would be amazing if it was possible to receive vouchers from the GP to help with mental health Podiatry services that are affordable would be really helpful in this area (I am currently researching) as difficulty with feet inhibits mobility which inhibits fast walking and running. I get a good deal of stretching and weight lifting exercise through gardening and swimming - but games and activities involving brisk walking and running are currently limited for me because of painful feet.

Exercise should be subsidised by the NHS, as both a physical and mental treatment.

Some felt they were not able to access the classes and facilities in Bristol:

I have generalised osteoarthritis and have found various fitness activity group teachers don't really know how to deal with the limitations I have.

I find sports centres are not geared up for the less abled

I used to go to a Gym 2x/week, but they changed the machines so that you now need an App on your Phone to track your progress instead of filling in a paper worksheet. I am 74 and not very techie and I could not work how to do it, and the gym would not continue with paper records, so I stopped going. I miss it but have not found the motivation or confidence to start somewhere new.

Some respondents believed that exercise can contribute to poor health and injury:

It is worth considering the condition of people's joints, later in life, who have lost cartilage, as I have, worn away by too much activity, like cycling and walking, especially those with small, fairly gracile bone structures, and devising exercise that obviates these impediments.

While some claim the NHS would save money if more people were fitter they forget that there would be less hip and knee replacements, fewer bad backs, fewer visits to A&E as result of amateur sport!

A number of respondents who were older and/or disabled mentioned costs as a barrier for them or others:

The gyms near me have classes too early for me to go to. Or there are classes that are really expensive. I don't want to sign up and commit to a membership because if I've had a hard day or am in pain I can't go to the class and lose money. I am a member at a gym, for which I pay a reduced rate for pensioners. However, many more pensioners, financially worse off than I cannot afford even this reduced rate. (This also applies to people on low or no wages). Many of these people would use the Gym if the cost were less

I have hypertension and high cholesterol and overweight, on universal credits. I actively briskly walk to try and lose weight, but it not enough. I cannot afford to purchase gym membership. I am 46.

#### 12. Local Beliefs and Attitudes to Physical Activity

In addition to the quantitative data we reviewed as part of this needs assessment and the citizens panel survey we were interested in gaining the perspectives of those in the city that are least active and made contact with a number of existing community groups.

#### 12.1 Focus Group and analysis

The scope of this project allowed time to conduct one focus group and this used the following questions as a topic guide:

- When you think of physical activity what comes to mind?
- Do you feel you do about the right amount of exercise to be healthy?
- What helps you be more active?
- What stops you or gets in the way?
- What's it like for other people you know?
- Anything else you want to mention?

The focus group was held with a group of 6 women who meet in the Knowle West area of Bristol, all of whom are from South Bristol. Ages ranged from 24 – 55 with an average age of 38. Of the six women, two described themselves as white, three as white British and one as mixed white/ black Caribbean. Four described themselves as being carers and three as having mental health issues. Five of the group were very active in the discussion although one rarely spoke and seemed happier to listen. At least five of the group have dependent children.

From this focus group, the following themes were identified:

- 1. Body image, size, weight and confidence
- 2. Mental health
- 3. Children, childcare, time and other commitments
- 4. Injury and medical conditions including sciatica, arthritis, knee injury, pregnancy, anxiety
- 5. Support from others, people to go with and fitting in, feeling part of a family
- 6. Money, cost of exercise
- 7. Levels and type of exercise

#### 1. Body image, size, weight and confidence

The most prevalent theme which came up during the discussion was around body image and self- confidence. This was raised immediately at the start of the focus group as a reason why participants feel unable to be active and was returned to throughout. Initially this was simply to do with body shape and composition.

Participant 2: I ain't running round the block flapping all over the place. Because things do flap. Everything wobbles, my earlobes, my neck, my boobs, my belly, my thighs, my ankles, everything wobbles.

Often participants linked their weight, size and shape especially being overweight to a lack of confidence.

Participant 2: It doesn't matter what I do – I cannot lose weight now. And I think that because of having kids I feel like I'm a different shape so I'm always going to have a bigger body than previously. So yeh I'm super self-conscious.

Participant 4: But to me when I look in the mirror and when I take my top off all these rolls come from nowhere

Participant 2: I don't think thin just fit or fitter. If I could be this size but not be so flabby. Just toned up a bit. And feel better mentally about myself. Look at this \*indicates body\*. You get these women, bigger women. There's that woman and she's a big bird and she's gorgeous she's so like toned. And she's like look at my body and I wish I could feel like that.

This lack of body confidence seemed to be more than just a barrier to exercising outside and even the suggestion of home exercise initially met with resistance as this exchange illustrated.

Participant 2: Like you can do exercise in your house but even that I feel self-conscious about

Participant 4: I'd feel sorry for the TV

Participant 2: I'd feel sorry for the floor, and my neighbours

Even for those who are currently active trying a new type of exercise may be difficult as this individual who currently dances regularly revealed.

Participant 1: Because I decided I that's it I'm going to lose weight and I downloaded a jogging app on my phone so I started doing that and literally I had to for the warm up walk with my dog from my house to the field behind Asda and I'd let the dog off so he's running around getting his exercise and then I would run and run around the field but if anyone walked through the field I'd stop and I'd walk cos I was like – I can't deal with what they might think.

And those who have previously been active may feel unable to return to it.

Participant 4: I used to go to every dance class possible. Now you wouldn't even see me in one. From aged six to the time I left school I've done dance.

Facilitator: Have you thought about going back to dancing?

Participant 4: I have but I thought I don't want people watching me jump around.

Feeling confident was specifically linked to body size and shape.

Participant 2: When I was slim I didn't feel self-conscious.

2. Mental health

Mental health and links with physical activity was discussed. Sometimes this seemed a barrier to exercise.

Participant 2 I had a referral to the gym for exercise to help with anxiety and depression. I went into the gym and I shit myself (not literally) but I was so anxious because the entire gym was a glass wall. It was glass so that if you were coming out of the swimming pool you would see everyone in the gym if you were coming up the stairs you would see everyone in the gym.

There was also an understanding that mental health and the way we think can get in the way of being active.

Facilitator: So is there anything you feel would help you or other people to be more active –What are the main things getting in the way?

Participant 5: Their heads – their own thoughts.

However, there was also an understanding of exercise helping with mental health and a number of participants had personal experience of this. Many placed great value on the exercise they do e.g. dance, walking the dog in terms of its role in managing mental health.

Participant 1: ... because it's not just about dance because someone has something like going on outside of dance and they come to dance and they're a bit like down and you can see it. And it's like "what's going on babes" and we'll dance and like hitting it hard and because you've used that energy after chatting about something really shitty you feel like a million times better..... I think I would actually shrivel up and die if I didn't have my dance. If I didn't have that outlet. If I didn't have that for my mental health I literally don't know what I'd do.

Participant 5: With stress and depression – if I'm in that house and the kids are getting to me, I can really start to go downhill. I can mentally feel myself going downhill. Because there's 6 of them and one of me so it's like constant. So I'll be like – I'm taking the dogs for a walk and I will literally get the dogs and walk out the house and I'll be gone for 10-15 minutes. Walk around walk around and come back \*deep breath\*.

3. Children, childcare, time and other commitments

Five participants in the group have children – at least some of whom are still primary school ages although one had older children who were now adult too. One revealed during the conversation that she was pregnant and at least one is a single parent. All 5 describe having full responsibility for children with no mention of sharing care of them or other household tasks with another adult e.g. their partner despite only one having identified as a single parent. Childcare came up repeatedly as a reason that the women were not able to go to exercise classes although it sounded like they would value the time to themselves and away from full time parenting.

Participant 4: I feel like now I've got myself a job on a Saturday that's going to be the start of ... because before I've always just been full time mum and carer as well for my mum so then it's like you're not just you and the four walls. You and the children. You're not just trying to make a conversation with your three children.

Participant 5: Or glued to your phone cos you're desperately trying to get some sort of adult interaction.

There was discussion about when children get older and being them being at school and having more time but this also wasn't seen as a reliable solution.

Participant 5: That does sort of change when they get older. Once the oldest is like 8/9 and they start getting their own feet.

Participant 2: And then you get pregnant!

Participant 4: Yeh my partner he wants another one it's just like our youngest is nearly 4 and I'm getting my life back.

Even when children were not there e.g. at school, time was taken up with other commitments:

Participant 2: You schedule in your appointments Doctors, dentist – anything you've got to do without your kids you do it while they're not there. Like in your free time.

Participant 5: Free time isn't actually free time is it.

There was a link made between having children and changes in body shape which in turn led to a lack of body confidence as previously discussed.

Participant 2: like you've got some people who have got ten kids and are super skinny.

Participant 4: You see people who have gone from a skinny at size 6 and then had a baby and gone straight back from a size 12 to a size 6 the day after. And it's like can you give me your like recipe on how you do it please?

Childcare was a barrier for many.

Participant 3: Childcare is my biggest issue. Cos if I go somewhere for an hour I gotta pay someone 20 quid to look after my kids then pay to get in so that's 30 quid for an hours exercise.

Participant 2: Cos it's two hours with the babysitter to get there and back.

Participant 3: So what's the point in going cos I can't afford that.

Participant 4: I've got the same problem with mine because they're all different ages they're all at different stages. It's hard enough trying to find a babysitter to have the kids on a Saturday when I work.

Facilitator: So if childcare wasn't a problem if there was free childcare then would you then feel able to go or would there be other reasons?

Participant 3: If I didn't have to pay for childcare then yeh.

There were opportunities suggested when adult sessions might be run alongside the children's activity

Participant 3: It's like on a Saturday X (child) has two hours of gymnastics so I get two hours for myself. So it's amazing like I get two hours. So when they get older and I can leave them there and my knees better I can use that time to go out jogging. They've got an empty room over there and me and one of the other mums were saying why don't they put gym equipment in there and we could be in there....Like exercise bikes and do something rather than just sat there.

4. Injury and medical conditions including sciatica, arthritis, knee injury, pregnancy, anxiety

A number of participants described medical conditions which they currently have and are concerned about making worse through exercise.

Participant 4: I can't do exercise even if I tried. Cos I've got sciatica.

Participant 3: But I just can't hardly walk now let alone run so.....I won't be able to run for a while because of my injury which is depressing. Cos I can't exercise which makes me depressed. And it's nearly two years now.

Participant 2: But what worries me now is that if I start doing something now I'll kill myself before the baby's born. Like I feel like I would overdo myself. .....I don't know what I would do because it's painful to walk now because of my hips.

For those who are active, there was concern that medical conditions would eventually stop them.

Participant 1: The thing is I've got arthritis in my ankle. And that plays up. And I try and carry on dancing as best I can cos I know if I stop it's going to seize. And that's my dance over. I know at some point – quite soon probably – that's going to come to the end of my career. But even swimming I can't do swimming. The movement in the water makes my ankle worse – do you find that?

One participant also described how walking more has helped to manage or alleviate medical conditions:

Participant 5: But I noticed when I stopped driving, now I've got arthritis all over my body now it's in my back it's everywhere. But since I stopped driving the arthritis seems to have eased up a bit. My asthma seems not existent now – I used to have asthma but it seems to have just gone. My mental health's a lot better because I'm not stuck in a car. I'm seeing people a lot more. I'm seeing things that's going on because I'm not concentrating on the road. And

I'm walking. Just walking out and about. When you drive for 30 years, I mean I've now got a push bike. When you drive you're not concentrating on the world around you you're concentrating on driving so you miss a lot of things and your fitness is crap. I used to walk down to the end of the street and I'd be like \*breaths heavily\*

5. Support from others, People to go with and fitting in, feeling part of a family

A number of the women in the group know each other, socialise together and were supportive of each other during the discussion. They also described both how they would value support from friends to exercise and how their existing exercise groups help support them and showed admiration for other people outside of the group who exercise.

Participant 4: If you start at the same time and you're both going and this is what I aim for and we're both doing it and we're both looking at each other.

Participant 3: Motivate each other

Participant 4: Both kick each other up the backside

Participant 2: and if you say I can't make it tonight cos I'm not really feeling up to it you're mate will go come on

Participant 4: If you don't come they're calling you out your house sorta thing.

There was admiration for others that do exercise.

Participant 5: They're walking rather than running. Can you remember X who used to work down at X? Big girl and it was her and X who lost their jobs at the same time both of them laid off? She lives down by me. Sort of round the back from me. And she's been ... very very big girl, very tall, broad shouldered and built like a bloke really. The last few months I've noticed her jogging around our area and she went from walking – out of puff bright red face you know and now if we cross it's like she's actually jogging. She's actually, y'know the redness has gone, she's smiling more.....And you can see she's persevered keep doing it even though she knows or she feels that she looks ridiculous. She doesn't she looks amazing if you ask me..... Well fair play they're doing it and I'm not.

#### 6. Money, cost of exercise

None of the group described being in full time employment or anything other than a Saturday job and the impression was that money was a barrier to participating in exercise as well as paying for childcare to attend.

Participant 1: I think it's quite expensive it's one of those things as well that once you've had children you'd rather pay for them to go to a club and enjoy it. I'd rather put money into that.

Facilitator: Is there a reason you're not doing yoga now?

Participant 2: Um I couldn't afford it – it was £6 a week... it got a bit like I could either spend £6 on pizza for X (child) for the week or go yoga.

Participant 4: It's a bit like with fruit and veg a lot of places which like to make you feel health and better in yourself it is expensive. It's like slimming world – I had to pay a tenner yesterday other than that it's a fiver a week.

#### 7. Levels and type of exercise

Two members of the group described being regularly active currently but all members of the group described exercise they had previously enjoyed participating in or activity they may consider. Mentioned as part of the discussion were dancing, swimming, running, rugby, yoga, walking, cycling and Zumba.

Activity levels for local population

Facilitator: Do you think people are active enough to be healthy?

Participant 2: Not the people I know.

#### 12.2 Email response

Using the same topic guide as the focus groups, residents from Lawrence Weston were invited to respond via email. Whilst number of responses were low, we felt the following warranted inclusion.

The respondent is a male of 74 years old who lives in an independent dwelling establishment in Lawrence Weston.

"My view of physical activity is any exercise from walking to jogging to gym work. Even sitting in a chair doing some routines. I do not do enough exercise as I probably do no more than 5000 paces per day.

Good weather and company helps me be more active. Availability of equipment would be of assistance e.g. Treadmill, or pedometer. Organised sessions would help motivate but logistically impossible.

The curse of the scooter prevents able people from walking to the shops. There are many people who are relatively mobile but resort to a mobility scooter out of laziness. The immobile people are not motivated to do any exercise due to lack of organised sessions.

Independent living establishments are keen to offer breakfast clubs, tea parties and such like but not any exercise clubs. It could be that the response is poor. It is very hard to get people out of their homes. Even the breakfast clubs are only supported by approximately 10 to 15 % of residents."

#### 13. Commentary and Recommendations

This project has examined the benefits to health of physical activity and the policy, strategy and guidance context. We have examined data for levels of physical activity and surveyed local people to gain additional data and analysed this.

This data suggests that many adults in Bristol are meeting the CMO Moderate to Vigorous Physical Activity Guidelines recommendation and will be gaining the associated health benefits. However, there are high levels of inactivity for people living in areas of deprivation and for some equalities groups. Consequently the many health benefits of physical activity are being disproportionately enjoyed more by those who already enjoy better health and thus adding to the gap in health inequalities in Bristol.

This project has identified themes from the data which we will further discuss:

- Themes from the data Target Populations
- Themes from the data Activities

#### **13.1 Target Populations**

Inequality was identified as an overall theme from the data we examined for this project and a number of groups were identified that were found to be reporting lower levels of physical activity.

Target populations were identified as:

- Disabled Adults / adults with long-term conditions
- Older Adults
- Women and Girls
- Those living in the most deprived areas

#### Disabled adults / adults with long-term conditions

The data suggests that Disabled adults in Bristol are far less likely to report they engage in physical activity than the Bristol average including cycling or walking to work. Responses to the Citizens Panel Survey suggest that there is a belief that physical disabilities may prevent individuals engaging in physical activity, that extra advice is needed for those with medical conditions and/ or that physical activity can damage health.

In response to the question "What limits you from doing more physical activity?" on our citizens' panel survey 21.2% of respondents answered "medical reasons" or "disability".

#### **Older Adults**

National and local data suggests that physical activity levels are lower amongst older adults. National data suggests that for those in the age group 75 and over, a higher percentage are inactive than active.

We were pleased that 28.8 % of respondents to our citizens' panel were over 65 and that their views are represented. A number gave further information in the comments section which shows cross over with older age and medical conditions.

Feedback from an older gentleman in Lawrence Weston suggests that exercise sessions in sheltered accommodation may be a good way to reach some older people.

#### Women and Girls

Data across most activities suggested lower percentages of local women and girls engaging in physical activity compared to men and boys. This was particularly noticeable in the data for young women and girls of secondary school age. The data for walking however, suggests average or above levels for this group.

Barriers to activity were identified through the Pupil Voice survey through the focus group and covered themes of body image, size, weight, confidence and being shy about how they look or doing activity in front of other people.

#### Those living in the most deprived areas

Local data suggests that those living in the most deprived areas were less likely to report they do enough exercise, play sport once a week or cycle to work. Those in the most deprived decile also reported higher average sitting time via the Citizens' Panel survey.

#### 13.2 Activities Walking

We noted the following on the topic of walking from this project:

- Pupil Voice data showed that the majority (75.8%) of respondents reported walking for at least 60 minutes on the previous day. The average time spent walking was 122 minutes.
- In answer to the question "What types of activities would you participate in if they were available in your neighbourhood?", 65.1 % of Citizens' Panel respondents answered "Walking".
- The gender split for walking data was different than for other activities with female respondents to the Quality of Life 2018/19 survey more likely to report they walk to work than males. Pupil voice data also shows a higher average walking time for respondents in years 8 and 10 than for males.
- Walking was identified as a main theme in analysis of the comments on the Citizens' Panel Survey with a number suggesting improvement to help them walk more.

#### Cycling

We noted the following on the topic of walking from the project:

- The inequalities identified through the Quality of Life data for those who cycle to work showed notable and wide inequalities especially by gender and across all ages
- Of those who responded to the Pupil Voice survey, only 17 % of females in secondary school reported they cycle to work compared to 38% of males.
- In the Citizens' Panel survey in answer to the question "What types of activities would you participate in if they were available in your neighbourhood?" 28.3% answered "Cycling".
- Cycling was identified as a main theme in the analysis of the comments on the Citizens' Panel Survey with a number suggesting improvements to increase uptake of cycling.

#### 13.3 Recommendations

The following recommendations have been formulated using the World Health Organisation's 20 actions as well as recommendations and guidance from Sport England, Public Health England and NICE combined with our findings from local data. They are intended to guide future work in Bristol.

These should be considered with the following local target populations in mind:

- Disabled Adults
- Older Adults
- Women and Girls
- Those living in the most deprived areas

These twelve recommendations are presented in alphabetical order:

#### 1. ACTIVE TRANSPORT

Partner with internal council transport colleagues as well as external transport and active travel organisations to strengthen links between physical activity, sport, health and transport to ensure cohesive systems across these. Work together to achieve common aims such as active travel plans for schools, workplaces and sporting events ensuring engagement of local target populations.

#### 2. CAMPAIGNS AND RESOURCES

Link in with national level campaigns and advertise and promote trusted sources of information on physical activity ensuring these are accessible to and reach local target population.

#### 3. CHILDREN

Through the Healthy Schools work and other interventions, target children and young people, especially women and girls of secondary school age within relevant local target populations.

#### 4. COMMUNITY EMPOWERMENT

Use community empowerment approaches and co-production of solutions in line with Asset Based Community Development (ABCD) to agree projects and improvements to physical activity access with local target populations.

#### 5. DATA

Continue with regular population surveillance of physical activity and sedentary behaviour. Strengthen data collection and evaluation of uptake of physical activity offers by target populations. Consider facilities and locations which may be used for physical activity and investigate possibilities to monitor uptake of use of parks, pavements, cycle routes and all green, grey and blue outdoor areas as well as leisure centres and sports pitches.

#### 6. FACILITIES

Strengthen the quality, availability and accessibility of appropriate facility provision which responds to the needs of local target populations, prioritising those who currently experience inequality of access.

#### 7. FAMILIES

Explore opportunities for multi-generational physical activity opportunities which consider the needs of differing ages, abilities and family groupings. Ensure that children have access to role models across ages and communities and see their adult caregivers enjoying being active alongside them wherever possible.

#### 8. LEADERSHIP

Identify a senior level physical activity champion who is responsible for developing and implementing local strategies, policies and plans.

#### 9. POLICY and STRATEGY

Use this needs assessment and recommendations as a foundation for a physical activity strategy for Bristol which links in with other appropriate strategies such as transport, cycling and walking strategies.

#### 10. PROFESSIONAL PARTNERSHIPS

Work across disciplines and organisations including healthcare, Public Health, Sport and Leisure, transport, planning, academic, education, business and community experts to share information, best practice and resources.

#### 11. RESEARCH AND GUIDANCE

With support from academic partners, monitor the latest research and guidance on physical activity from trusted sources such as Public Health England, Sport England and NICE and revise approaches as new evidence emerges.

#### 12. TECHNOLOGY

Explore the use of and engage with developments in digital technologies e.g. smart phone apps and accelerometers to aid behaviour change and data collection for the local population.

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