The Positive Contribution of Physical Activity and Sport to Scotland









This paper presents the positive contribution of physical activity and sport to Scotland, through a cross policy lens. Drawing on evidence to illustrate the direct and indirect benefits that contribute towards multiple outcomes and priorities simply by enabling people to be more physically active.

A more detailed briefing paper is contained within the pages that follow and is summarised in Appendix 1: A Summary of the Positive Contribution of Physical Activity and Sport to Scotland across four priority policy areas.

Diagram 1: The graphic below illustrates the positive contribution of physical activity and sport to the people of Scotland in a cross policy context, aligned to Scotland's National Performance Framework¹, Scotland's Public Health Priorities² and the Active Scotland Outcomes Framework³.

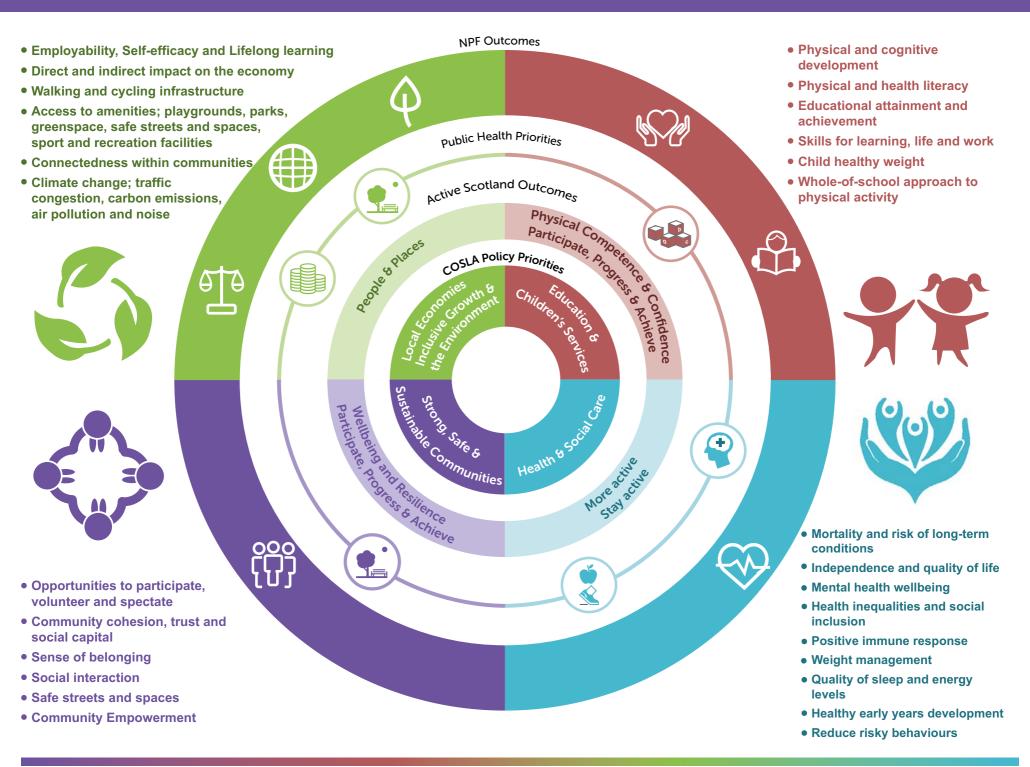
¹ Scotland's National Performance Framework. Scottish Government. 2018.

² Scotland's Public Health Priorities. Scottish Government. 2018.

³ Active Scotland Outcomes Framework, Scottish Government, 2014.

The Positive Contribution of Physical Activity and Sport to Scotland

Physical activity and sport provides a range of physical, mental, social, environmental and economic benefits:











Introduction

The benefits of physical activity to local government are substantial and conversely, local government is key to enabling individuals and communities to be more physically active, by weaving physical activity across their relevant functions, including; health and social care, education and children's services, community sport and leisure, spatial and neighbourhood planning, transport infrastructure, economic development and regeneration.⁴

The graphic above illustrates the positive contribution of physical activity and sport to the people of Scotland in a cross policy context, aligned to Scotland's National Performance Framework⁵ which also incorporates Scotland's commitment to the United Nation's Sustainable Development Goals, Scotland's Public Health Priorities⁶ and the Active Scotland Outcomes Framework.⁷

What is Physical Activity?

Physical activity is a broad term for human movement that is undertaken in homes, villages, schools, cities, organisations and communities, for many reasons.⁸ It is inclusive of both incidental and deliberate bodily movement such as everyday activities (e.g. active travel (walking/cycling or wheeling), heavy housework, gardening, DIY, occupational activity), active recreation (e.g. recreational walking, cycling, active play or dance) or sport (e.g. sport walking and cycling, swimming, formal and informal sport, structured competitive activity, exercise and fitness training and individual outdoor pursuits).⁹

Risks of Inactivity

Physical inactivity is recognised as one of four leading modifiable risk factors for non-communicable disease alongside tobacco use, unhealthy diet and the harmful use of alcohol. The UK analysis of the Global Burden of Diseases, Injuries and Risk Factors Study estimated that physical inactivity contributes to almost one in ten premature deaths from coronary heart disease, and one in six deaths from any cause. 11

Physical inactivity has a significant financial burden on the UK healthcare service, with the direct financial cost estimated to be as high as £1.2billion each year. Whilst the World Health Organisation estimate that 1-3% of healthcare expenditure is attributed to inactivity. 13

⁴ Health matters: getting every adult active every day. Public Health England. 2016.

⁵ Scotland's National Performance Framework. Scottish Government. 2018.

⁶ Scotland's Public Health Priorities. Scottish Government. 2018.

⁷ Active Scotland Outcomes Framework. 2014.

⁸ Eight Investments that work for Physical Activity. International Society for Physical Activity and Health. 2020.

⁹ Start Active Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers. Department of Health. 2011.

¹⁰ Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020. World Health Organisation. 2013.

¹¹ Physical Inactivity and Sedentary Behaviour Report. British Heart Foundation. 2017.

¹² Physical Inactivity and Sedentary Behaviour Report. British Heart Foundation. 2017.

¹³ Global Action Plan for Physical Activity. World Health Organisation. 2018.

Scale of the Problem

The latest Scottish Health Survey shows that only 69% of children (2yrs to 15yrs) and 66% of adults (16yrs to 75yrs plus) met the CMO Physical Activity Guideline for moderate to vigorous physical activity (MVPA).¹⁴

However, only 29% of adults met the MPVA and muscle strengthening physical activity guideline combined. This reduced to only 8% for those over 75 years of age.¹⁵ This has significant implication for adults who may experience falls due to muscle loss and the ability to maintain/retain independence and achieve healthy life expectancy.

In Scotland, 45% of adults aged 16 and over, reported living with long-term conditions (Scottish Health Survey, 2018), equating too approximately 2 million people (Healthcare Improvement Scotland, 2019).

The Benefits of Physical Activity

There is robust evidence that regular physical activity provides a range of physical, mental, social, environmental and economic benefits; reducing the risk of many long-term conditions, managing existing conditions, maintaining musculoskeletal health, developing and maintaining physical and mental function, enabling people to retain independence in later life, supporting social inclusion, helping maintain a healthy weight and reducing inequalities particularly for people with long-term conditions. In addition to the multiple health benefits of physical activity, societies that are more active can generate additional returns on investment including a reduced use of fossil fuels, cleaner air and less congested, safer roads. 16 17

More specifically, physical activity can positively contribute to a number of cross cutting policy areas including Education and Children's Services, Strong, Safe and Sustainable Communities, Health and Social Care, Local Economies, Inclusive Growth and the Environment.

Education and Children's Services



Sport and physical activity can enhance the contribution of local government to education and children services through:

- Physical and cognitive development.
- Development of physical and health literacy laying the foundations for life long participation.
- Improve educational attainment, either directly (improved grades, school engagement, behaviour and reduced absenteeism) or indirectly (by enhancing skills such as self-control and concentration, team working and time management).
- Whole-of-school approach to physical activity.

¹⁴ Scottish Health Survey 2019. Scottish Government. 2020.

¹⁵ The Scottish Health Survey 2018: main report - revised 2020. Scottish Government. 2020.

¹⁶ Health matters: physical activity - prevention and management of long-term conditions. Public Health England. 2020.

¹⁷ Global Action Plan for Physical Activity. World Health Organisation. 2018.

Early childhood is a period of rapid physical and cognitive development and a time during which a child's habits are formed and family lifestyles are open to change.¹⁸

The development of physical and health literacy will enable children to gain and build the necessary motivation, confidence, physical competence and knowledge and understanding to take responsibility for their engagement in physical activity throughout their life.¹⁹

Evidence shows that physical activity can improve educational attainment, either directly (improved grades, school engagement, behaviour and reduced absenteeism) or indirectly (by enhancing skills such as self-control and concentration, team working and time management).

A whole-of-school approach to physical activity is internationally recognised as part of a whole systems approach to physical activity and evidenced as one of eight codependent investments that work at scale. This involves: prioritising regular, high quality, physical education classes; providing suitable physical environments and resources to support structured and unstructured physical activity throughout the day (e.g. play and recreation before, during and after school); supporting active travel to school programmes; and enabling these actions through supportive school policies and by engaging staff, students, parents and the wider community. This approach provides maximal opportunities for school-based physical activity participation, particularly given that children spend more time in schools than any other venue away from home and can also apply to nurseries.²⁰

The proposed United Nations Convention on the Rights of the Child (UNCRC) (Incorporation) (Scotland) Bill²¹ seeks to enshrine in the UNCRC in Scots law, making it unlawful for public authorities to act incompatibly with the incorporated UNCRC requirements, giving children, young people and their representatives the power to enforce their rights. Article 31; the Right to Play, includes the right of the child to engage in play and recreational activities appropriate to their age and culture. While Article 24 focuses on the Right to Health and Health Services.

Whilst the International Charter for Physical Education, Physical Activity and Sport²² states that physical education and sport is a fundamental right for all.

Taking a rights-based approach, the right to be physically active goes hand in hand with Education and Children's Services, Health and Social Care, Strong, Safe and Sustainable Communities and Local Economies, Inclusive Growth and the Environment.

¹⁸ Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age. WHO. 2019.

^{19 &}lt;u>International Physical Literacy Association</u>. Website accessed 18 January 2021.

²⁰ Eight Investments that work for Physical Activity. International Society for Physical Activity and Health. 2020.

²¹ The United Nations Convention on the Rights of the Child (Incorporation) (Scotland) Bill.

²² International Charter of Physical Education, Physical Activity and Sport. UNESCO. 2015.

Strong, Safe and Sustainable Communities



The evidence suggests that sport and physical activity can lead to strong, safe and sustainable communities through:

- Building stronger communities by bringing people from different backgrounds together via participating, volunteering and spectating
- Improving community links, levels of cohesion and social capital
- Improving residents' sense of belonging in an area
- Feeling more connected to your neighbourhood or community
- Increasing levels of social trust
- Increasing number of people of all ages out on the streets, making public spaces seem more welcoming and providing opportunities for social interaction and children's play
- Mobilising community assets that enable physical activity increases people's control over their health and promotes equity.
- Community wide programmes are core to a whole systems approach to physical activity operating concurrently across settings using a combination of multiple levels actions (e.g. policy, environment and intervention based).

Sport and physical activity is widely seen as a conduit for people of different backgrounds to interact, building bridging capital, via participating, volunteering and spectating. Although much of the evidence relating to migrants and sport focused on opportunities to adapt to the host country ('acculturation'), it also covered bridging divides between men and women, homeless people and those who are not homeless, and people with different employment backgrounds, building links and bonds with others, which increased the sense of community and citizenship.²³

Local government plays an important leadership role in bringing together statutory, voluntary and private sectors and engaging their populations to build confident and connected communities as part of efforts to improve health and reduce health inequalities.

Mobilising community assets that enable physical activity increases people's control over their health and promotes equity. This combined with community wide programmes are core to a whole systems approach to physical activity using a combination of concurrently actions across settings at multiple levels (e.g. policy, environment and intervention based).²⁴

²³ Review of evidence of the outcomes for sport and physical activity: A rapid evidence review. Sport England. London. 2017.

²⁴ Eight Investments that work for Physical Activity. International Society for Physical Activity and Health. 2020.

Health & Social Care



The UK Chief Medical Officers' (CMOs) recently restated that "If physical activity were a drug, we would refer to it as a miracle cure, due to the great many illnesses it can prevent and help treat." (UK CMOs Physical Activity Guidelines, 2019).²⁵

Throughout the COVID-19 response, renewal and recovery physical activity has and continues to be recognised as fundamental to physical and mental health and wellbeing. Physical activity has a positive effect on the immune system^{26 27} with those who are physically active at decreased risk of infectious disease or mortality as a consequence of infections. ^{28 29}

Physical and Mental Wellbeing

The benefits of physical activity to our physical and mental wellbeing are well documented^{30 31} and include the following:

- Reduced mortality and improved quality of life in ageing.
- Prevention of ill health (including cancer, strokes, type 2 diabetes and heart disease)
- Therapeutic and management effects (particularly for people affected by cancer)
- Improvements in strength, balance, gait and motor skills (tending to focus on older adults retaining independence or younger people, or on rehabilitative contexts), and
- Maintaining a healthy body weight.

Other physical wellbeing outcomes evidenced include:

- Improved quality of sleep
- Increased energy levels
- Healthy early years development
- Reduced risky behaviours such as smoking

Physical activity has an important role in promoting mental health and wellbeing, by preventing mental ill health, improving mental wellbeing and improving the quality of life of those experiencing mental health illnesses. Evidence shows that physical activity can reduce the risk of depression, dementia and Alzheimer's. As well as enhance

^{25 &}lt;u>UK Chief Medical Officer's Physical Activity Guidelines</u>. Joint publication by the Department of Health, Scottish Government, Welsh Government and Northern Ireland Assembly. 2019.

²⁶ Chastin. Effects of Regular Physical Activity on the Immune System, Vaccination and Risk of Community-Acquired Infectious Disease in the General Population: Systematic Review and Meta-Analysis. Sports Medicine. 2021.

²⁷ A Call to Action: Physical Activity and COVID-19. Sallis and Pratt. PLAYCORE. Blog April 2020.

²⁸ Chastin. Physical Activity Potential Impact on COVID-19 Pandemic. Glasgow Caledonian University. Internal Evidence Briefing July 2020.

²⁹ Chastin. Effects of Regular Physical Activity on the Immune System, Vaccination and Risk of Community-Acquired Infectious Disease in the General Population: Systematic Review and Meta-Analysis. Sports Medicine. 2021.

³⁰ Health matters: physical activity - prevention and management of long-term conditions. Public Health England. 2020.

³¹ Global Action Plan for Physical Activity. World Health Organisation. 2018.

psychological well-being, by improving self-perception and self-esteem, mood and sleep quality, and by reducing levels of anxiety and fatigue.³² In 2019, adults who met the MVPA physical activity guidelines had a higher mental wellbeing (measured by WEMWBS) mean score than those who did not.³³ Therefore there is significant opportunity for physical activity to contribute to the mental health in Scotland.

The National Physical Activity Pathway provides an evidence based solution that can feasibly contribute to the delivery of the Scottish Government Framework for supporting people through Recovery and Rehabilitation during and after the COVID-19 Pandemic. Further collaborative working with local Health and Social Care Partnerships, local government, NHS Boards, Leisure Trusts, sportscotland and the Movement for Health Coalition, will greatly enhance this work.

Volunteering in sport has a positive relationship in promoting life satisfaction and reducing negative emotions. Long-term volunteers show significantly higher levels of wellbeing compared with new volunteers.³⁴

Local Economies, Inclusive Growth and the Environment



Sport and physical activity can have a positive impacts on employability were discussed in terms of employment opportunities, earnings, job performance and job satisfaction. The evidence on NEETs (young people not in education, employment or training) found positive impacts of sport participation or volunteering in terms of employability.

The social and economic value of volunteering is significant, with the annual value of volunteering in Scotland estimated at £2.26 billion.³⁵

A positive association in between sport and physical activity and self-efficacy (for example motivation, goal setting and commitment), for groups including elderly people and disaffected young people was also evidenced.³⁶

There is some evidence on the direct impact of the sport sector on the economy (largely in terms of gross value added or job creation), and more evidence on the indirect impact of participation in sport and physical activity on the economy (reduced healthcare costs due to a healthier population, reduced crime, reduced sickness absence, improved productivity and improved employability).³⁷

The COVID-19 pandemic reinforced the importance of local places and spaces, for people's health and wellbeing. The influence of spatial planning, building design (housing, education, health, workplace and community facilities) and natural environment that intertwine to create local neighbourhoods, has a significant impact on the health and wellbeing of residents and communities alike.

³² Start Active Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers. Department of Health. 2011.

³³ Scottish Health Survey 2019. Scottish Government. 2020.

³⁴ Review of evidence of the outcomes for sport and physical activity: A rapid evidence review. Sport England. London. 2017.

³⁵ Volunteering for All: National Framework. Scottish Government. 2019.

³⁶ Review of evidence of the outcomes for sport and physical activity: A rapid evidence review. Sport England. London. 2017.

³⁷ Review of evidence of the outcomes for sport and physical activity: A rapid evidence review. Sport England. London. 2017.

The need for place-based approaches to public health is well documented³⁸ with the most recent Programme for Government³⁹ commit to work with local government to take forward 20 minute neighbourhoods - the creation of liveable, accessible places, with thriving local economies, where people can meet their daily needs within a 20 minute walk from their home. This presents a significant opportunity to local government to enhance local environments and access to physical activity infrastructure and services. Physical activity is integral to the development of many dimensions that form a 20 minute neighbourhood including:

- Walking and cycling infrastructure (for travel and recreation)
- Access to public transport
- Safe streets and spaces
- The ability to age in a place due to accessibility of local services and amenities
- Access to local playgrounds and parks, green streets and spaces, and community gardens
- Sport and recreation facilities
- Local schools and lifelong learning opportunities
- Local health facilities and services; Access to shops via active travel and or public transport
- Local employment opportunities and overall connectedness of the above within the neighbourhood region.⁴⁰

In addition to the physical and mental health benefits of physical activity to the individual, there is evidence that walking and cycling can have wider population benefits including reductions in traffic congestion leading to reduced carbon emissions, air pollution, noise, road casualties and economic benefits.⁴¹

³⁸ A Scotland where everybody thrives: Public Health Scotland's strategic plan 2020–23. Public Health Scotland. 2020.

³⁹ Protecting Scotland, Renewing Scotland: The Government's Programme for Scotland 2020-2021. Scottish Government. 2020.

⁴⁰ Comparing the 20 Minute Neighbourhood and Traditional Scenarios in Edinburgh Local Development Plan: a Rapid Scoping Assessment. Improvement Services. 2020.

⁴¹ Cycling and walking for individual and population health benefits: A rapid evidence review for health and care system decision-makers. Public Health England. 2018.

Appendix 1: A Summary of the Positive Contribution of Physical Activity and Sport to Scotland

The table below provides a summary of the contribution of physical activity and sport to the four priority policy areas:

Policy Priorities	Contribution	Active Scotland Outcomes	Public Health Priorities	National Performance Framework Outcomes	Evidence-based Actions e.g.
Education and Children's Services: Working with councils to put children at the centre of our approach, by delivering positive outcomes based on the principles of GIRFEC, and ensuring local accountability for all Children's Services including Education.	 Enhanced Physical and cognitive development including: Physical activity in and around school such as PE, Active travel Sport and Play before, during and after. Development of physical and health literacy laying the foundations for life long participation. Raised attainment and wider achievement, either directly (improved confidence, grades, school engagement, behaviour and attendance) or indirectly (by enhancing skills such as self-control and concentration, team working and time management). Contribution to learning, life and work. Child healthy weight. 	We develop physical confidence and competence from the earliest age. We improve opportunities to participate, progress and achieve in sport.	Priority 2: A Scotland where we flourish in our early years.	We are well educated, skilled and able to contribute to society. We grow up safe, loved and respected so that we realise our full potential.	A whole-of-school approach to physical activity prioritising regular high quality physical education classes; suitable physical environments and resources to support physical activity throughout the day (e.g. sport, play and recreation before, during and after school); supporting active travel; supportive school policies and by engaging staff, students, parents and the wider community. ⁴²

⁴² Eight Investments that work for Physical Activity. International Society for Physical Activity and Health. 2020.

Policy Priorities	Contribution	Active Scotland Outcomes	Public Health Priorities	National Performance Framework Outcomes	Evidence-based Actions e.g.
Strong, Safe and Sustainable Communities: Tackling poverty and inequalities, protecting the vulnerable, and strengthening communities and improving their safety and sustainability.	 Building stronger communities: Bringing people from different backgrounds together via participating, volunteering and spectating. Improving community links, cohesion and social capital. Improving residents' sense of belonging, connected to your neighbourhood or community. Increasing levels of social trust. Providing opportunities for social interaction and children's play. Access to green/blue space and walking and cycling infrastructure. Community wide behaviour change approaches combining upstream and downstream interventions. 	We support wellbeing and resilience in communities through physical activity and sport. We improve opportunities to participate, progress and achieve in sport	Priority 1: A Scotland where we live in vibrant, healthy and safe places and communities.	We live in communities that are inclusive, empowered, resilient and safe.	Community wide programmes implementing multiple approaches, operating at different levels (upstream and downstream) within and across the physical activity system to impact on behaviour e.g. a combination of planning/built environment improvements, policy interventions and community programmes. 42 Sport and active recreation for all, providing access to spaces, places and services for all. Supporting active participation and volunteering across the life course, targeting those least active and where participation rates are lower. Fostering positive experiences to retain participants and supporting those returning to sport or engaging in modified sports. 42

Policy Priorities	Contribution	Active Scotland Outcomes	Public Health Priorities	National Performance Framework Outcomes	Evidence-based Actions e.g.
Health & Social Care: Supporting local government and Integrated Joint Boards to address demographic and financial challenges, enabling communities to live healthy, independent lives, and promoting an outcomes and prevention culture	 Physical activity provides a range of physical, mental, social, environmental and economic benefits: Reduced mortality, improved quality of life and independence in later life. Reduced risk of and manage many long-term conditions. Maintain musculoskeletal health. Develop and maintain physical and mental function. Enhanced mental health wellbeing and reduced risk of depression, dementia and Alzheimer's. Enhanced immune response. Support social inclusion. Maintain a healthy weight. Reduced health inequalities. Improved quality of sleep. Increased energy levels. Healthy early year's development. Reduced risky behaviours such as smoking. 	We encourage and enable the inactive to become active. We encourage and enable the active to stay active.	Priority 3: A Scotland where we have good mental wellbeing. Priority 6: A Scotland where we eat well, have a healthy weight and are physically active.	We are healthy and active.	Integration of physical activity into health and social care. Embedding physical activity as part of routine healthcare, with health professionals delivering brief advice, screening, brief interventions, referral and or signposting to community based opportunities 42. In social care (particularly of older adults), it involves care providers building physical activity into the daily lives of those they support within care settings; residential care homes and through care at home. 43

⁴³ Care About...Physical Activity Improvement Programme Evaluation. Care Inspectorate. 2020.

Policy Priorities	Contribution	Active Scotland Outcomes	Public Health Priorities	National Performance Framework Outcomes	Evidence-based Actions e.g.
Local Economies Inclusive Growth and the Environment: Building strong and sustainable communities by enabling councils to drive inclusive economic growth and investment in business support, economic development, skills and regeneration.	 Physical activity and sport has a positive impact on the local economy and the environment through: Employability, employment opportunities, earnings, job performance and job satisfaction. Self-efficacy (for example motivation, goal setting and commitment). Direct impact of the sport sector on the economy (largely in terms of gross value added or job creation). Indirect impact of participation in sport and physical activity on the economy (reduced healthcare costs due to a healthier population, reduced crime, and improved employability). The creation of 20 Minute Neighbourhoods integrating walking and cycling infrastructure (for active travel and recreational walking and cycling); 	We improve our active infrastructure – people and places.	Priority 1: A Scotland where we live in vibrant, healthy and safe places and communities. Priority 5: A Scotland where we have a sustainable, inclusive economy with equality of outcomes for all.	We have a globally competitive, entrepreneurial, inclusive and sustainable economy. We value, enjoy, protect and enhance our environment. We tackle poverty by sharing opportunities, wealth and power more equally.	Walking, wheeling and cycling infrastructure for travel or recreational purposes. Enhancing destination accessibility; designing pedestrian and cycling-friendly networks; reducing distance to public transport; enhancing the desirability of active travel modes and deterring private car usage. 42 20 Minute Neighbourhoods providing access to: public transport; safe streets and spaces; local services and amenities; playgrounds, parks, green streets and spaces, community gardens, sport and recreation facilities; schools and lifelong learning opportunities; local health facilities and services; access to shops via active travel and or public transport; local employment. 44

⁴⁴ Comparing the 20 Minute Neighbourhood and Traditional Scenarios in Edinburgh Local Development Plan: a Rapid Scoping Assessment. Improvement Services. 2020.

access to public transport; safe streets and spaces; the	WHO's Healthy Workplace model ⁴⁵ encourages
ability to age in a place due to	a holistic approach to
	· ·
accessibility of local services and amenities; access to local	physical activity in the
playgrounds, parks, green	workplace including: Design workplace environments that
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streets and spaces, community	promote incidental physical
gardens, sport and recreation	activity; supporting active
facilities; local schools and	commuting; policies such
lifelong learning opportunities; local health facilities and	as flexible working; social
	activities; educational events
services; access to shops via	to inform employees on the
active travel and or public	benefits and encourage an
transport; local employment opportunities and overall	active working culture (e.g. walking meetings).
connectedness of the above	watking meetings).
within the neighbourhood	
region	
Access to greenspace and	
safe walking and cycling	
infrastructure has a positive	
impact on climate change and	
health and wellbeing resulting	
in reduced traffic congestion,	
carbon emissions, air pollution,	
and noise and road causalities.	

⁴⁵ World Health Organization. Healthy Workplaces: a model for action: for employers, workers, policy makers and practitioners Geneva, Switzerland 2010 [Available from: https://www.who.int/occupational_health/publications/healthy_workplaces_model_action.pdf]